NOGAP B.6; PHYSICAL DATA COLLECTED IN THE BEAUFORT SEA, SEPTEMBER 1986

by

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Abstract

Cuypers, L.E., A.W. Blaskovich, E.C. Carmack, and R.W. Macdonald, 1988. NOGAP B.6; Physical data collected in the Beaufort Sea, September, 1986 Can. Data Rep. Hydrogr. Ocean Sci.: 59, 149pp.

A cruise to the Southern Beaufort Sea was carried out on September 1986, as a part of the NOGAP B.6 program. The major objectives of this program are to determine hydrocarbon pathways and primary productivity of the waters overlying the Mackenzie Shelf. Here we report supporting physical oceanographic data, including temperature, salinity, light transmission and attenuation, density (γ[S,t,0]), departure from freezing point, and dynamic height.

Key words: Arctic, Beaufort Sea, density, oceanography, salinity, temperature, transmissivity.

Résumé

Cuypers, L.E., A.W. Blaskovich, E.C. Carmack, and R.W. Macdonald, 1988. NOGAP B.6; Physical data collected in the Beaufort Sea, September, 1986 Can. Data Rep. Hydrogr. Ocean Sci.: 59, 149pp

Une campagne a eu lieu vers la mer de Beaufort du sud en Septembre, 1986, comprenant une partie du programme NOGAP B.6. Les objectifs principaux du programme sont les déterminations des trajectoires des hydrocarbures et de la production primaire des eaux au-dessus du plateau continental Mackenzie. Nous reportons ici les données d'appui relatives à l'océanographie physique en comprenant la température, la salinité, la transmission et l'atténuation de lumière, la densité (γ[S,t,0]), la déviation du point de congélation, et l'hauteur dynamique.

Mots-clé: Arctique, Mer de Beaufort, densité, oceanographie, salinité, température, transmission.

Acknowledgements

This work was funded by **Indian and Northern Affairs, Canada**, as part of the **Northern Oil and Gas Action Program**. We thank the officers and crew of the *Arctic Ivik* for their cooperation in navigating the ship and assisting on the deck. We are indebted to W. Buckingham for his help with the data processing, and particularly to R. Perkin for his willingness to give his time and share his expertise. S. Thomson assisted with advice on report layout. A. Ages translated the abstract into French. The manuscript was prepared using LaTeX.

1 INTRODUCTION

As part of an inter-disciplinary study (NOGAP-B.6) to measure the transport and fate of hydrocarbons over the Beaufort shelf, and the primary productivity of these coastal waters, we conducted a cruise on the *Arctic Ivik* chartered from Arctic Transport Ltd. in September 1986. This document reports on physical oceanographic data collected using a conductivity-temperature- transmissivity-depth (CTTD) probe; a companion report summarizes the concurrent chemical measurements [*Macdonald et al.;* 1988].

Figure 1 shows the location of the transect stations where CTTD (and bottle) data were collected; station coordinates are given in the station headers on both the data tables and plots. The station locations were determined from a transit Satellite Navigator by the ship's officers. The majority of positions are expected to be within 1 km of the true position [*Huggett and Mortimer;* 1971]. Coverage extended beyond the shelf break reflecting the distance of ice retreat; only at station 17 did we approach noticeable quantities of floating ice. CTTD casts were performed at all stations. However, probe malfunctions resulted in a loss of data at stations 5, 6, and 8.

Figure 2 shows the location of stations where we carried out a detailed CTTD/acoustic survey of the Mackenzie plume boundary and associated salt wedge late in the cruise. These stations have been designated in the Figures and Appendix with an 'S' preceeding the number.

2 INSTRUMENTS

2.1 Guildline Conductivity-Temperature-Depth System

Two instrument systems were taken: an AML Model 12 and a Guildline model 8706. However, the AML system malfunctioned early in the cruise and yielded no useful data. The Guildline probe was equipped with a 2000 decibar pressure sensor. The output signal of the pressure sensor was subject to both noise and a pressure offset which varied in time. Plots of pressure versus time suggest the noise level approached ± 1.5 decibars. To estimate the pressure offset, the probe must be held at a fixed depth which is difficult in rough weather. We estimated the range in pressure offset over the entire cruise at 10.8 decibars with short-term (between individual casts) variation being generally less than 1.0 decibars. The worst case of a short-term jump in pressure offset was estimated at 6.3 decibars. For proper flushing of the conductivity cell, the probe should drop at a fall speed of 1.5 m/sec which is not achievable in water depths less than 15 m. Thus, the Guildline probe was not the ideal instrument for work in a shallow estuary.

Finally, the instrument occasionally yielded errors in conductivity ratio (spikes). These were removed during the despiking procedure described below.

2.2 Sea-Tech Transmissometer

The Guildline probe was fitted with a Sea-Tech beam transmissometer which records percent light transmission over a given path length [*Bartz et al.*; 1978]. Its specifications are listed in Table 1:

For a well collimated monochromatic light in a scattering or absorbing medium, the light lost in transit is given by:

$$\%T/100 = \epsilon^{-cr}$$

where c is attenuation coefficient (1/m) and r is the path length (25 cm). Accuracy for transmissometers is best near the region $cr = 1$. Both the percent transmission and the calculated attenuation coefficient are reported in the accompanying data tables.

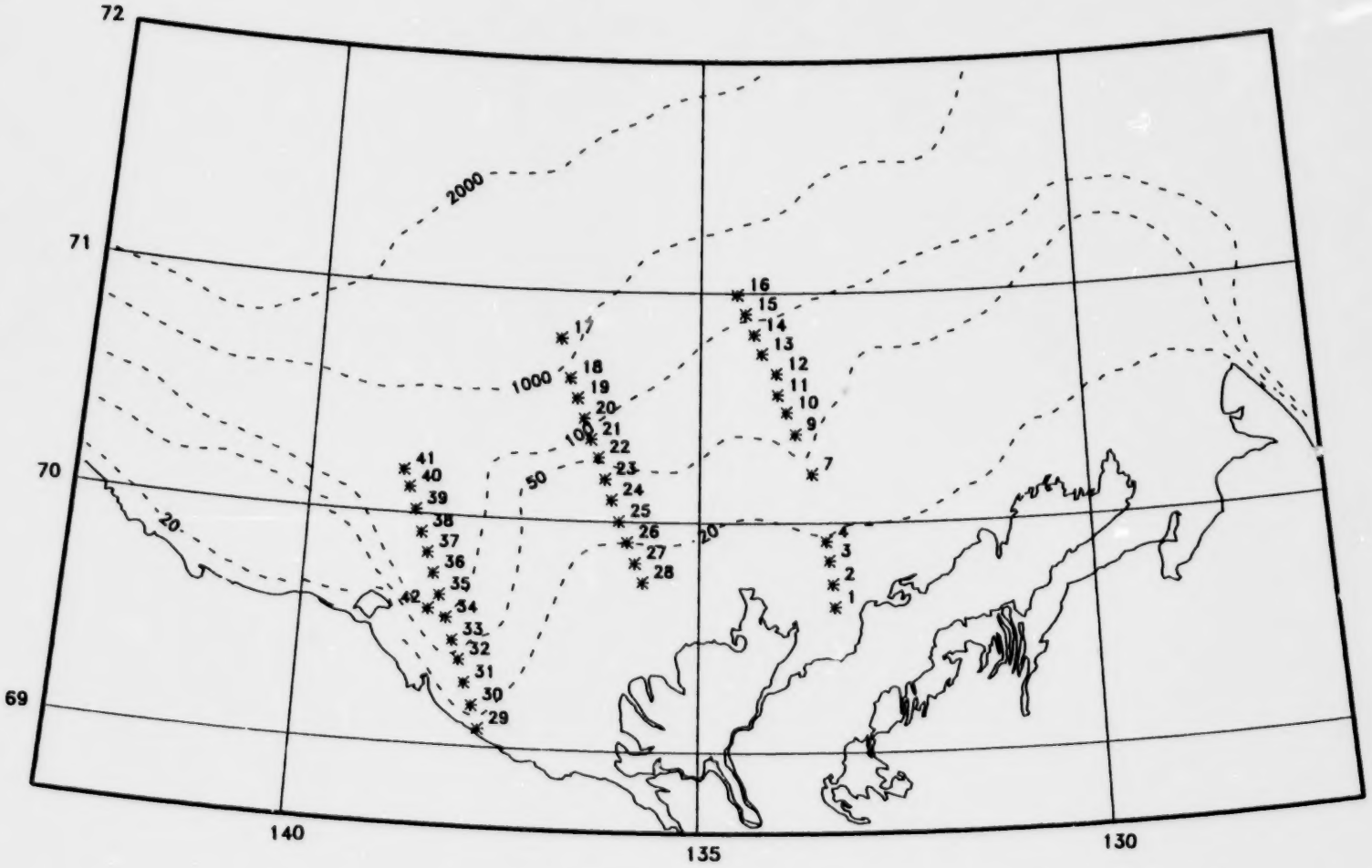

Figure 1: CTTD Transect Stations.

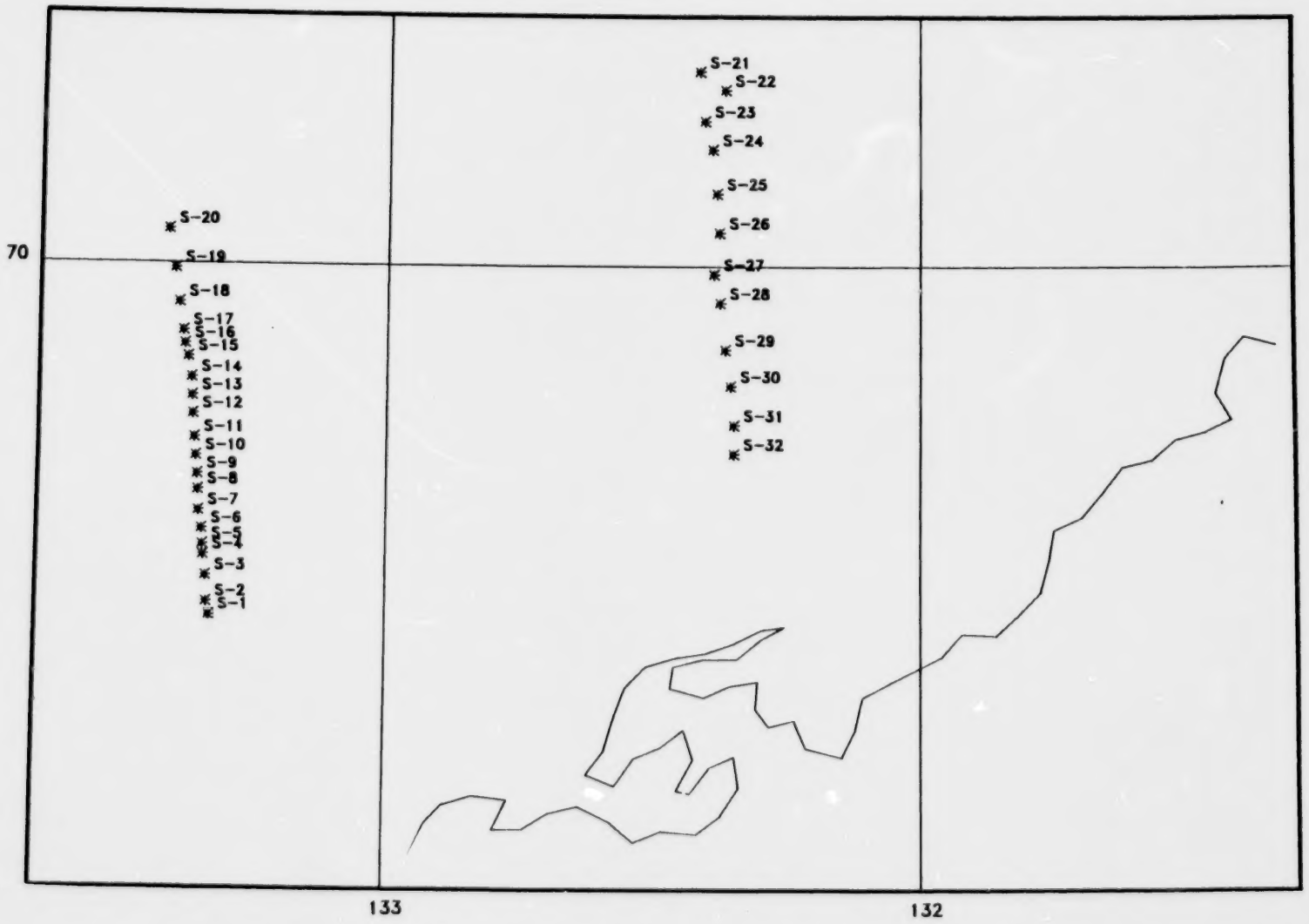

Figure 2: CTTD Plume Boundary Stations.

Table 1: Transmissometer Configuration

Water Path Length	25 cm
Beam Diameter	15 mm
Transmitted Beam Collimation	< 5 milliradians
Receiver Acceptance Angle (in water)	< 18 milliradians
Light Source, Wavelength	LED, 660 nm
Range (in water)	0 - 100% (0-5 VDC)
Accuracy	±0.5%
Linearity	±0.1%
Temperature stability	±0.3% (0-25°C)

3 DATA PROCESSING

The data were recorded on audio cassette tape in the field. Using a digital input/output board and assembler program, the data were logged onto the disk drive of a Compaq Deskpro 386. The bit patterns were decoded into 4 byte integers, and then run through an automated despiking procedure that checked for outlying values. Finally, the data were calibrated, manually edited, and computed at one metre intervals. All software was written in FORTRAN for an IBM compatible personal computer.

3.1 Despiking

Three despiking procedures were used. The first computed a fit to small subsections of the cast, rejected values that departed from the fit by more than a specified number of standard deviations, and replaced these outlying values by interpolation. The second procedure treated especially noisy data by writing the offending records to a log file for later use with an interactive editor. The third procedure was an interactive editor by which the records were checked for standard deviation or first difference, and statistics were computed.

3.2 Calibration

A comparison with bottle samples collected independently during the cruise (i.e. not specifically for the purpose of CTTD calibration - see below under data validation) indicated that the CTTD temperature and salinity readings were unbiased relative to bottle data but that the CTTD pressure sensor may have been giving depths about 5% high relative to the wire. The bottle data have not been used to correct the CTTD output reported here in the data tables.

A separate algorithm was used to compensate for the difference in response time between the temperature sensor and the conductivity cell.

3.3 Data Reduction

At 25 scans per second, the data are spaced 6 cm apart if the probe is falling at its optimal speed (1.5 m/s). The final step in data processing is to average the data in such a way as to reduce the depth resolution to 1 m. This is done using a binning procedure followed by a linear least squares fit and evaluating the fit at the central point of the bins.

The program also computes a number of derived quantities such as light attenuation, density (γ S,t,0), the departure from freezing point, speed of sound, and dynamic height (*Foffonoff and Millard*; 1983)

3.4 Algorithm limitations and data quality

There are a number of considerations which affect the quality of the CTTD data reported here. The pressure sensor has an offset which is not constant in time. A valid way to estimate this effect is to lower the instrument to a known fixed depth and record the instrument pressure response. Such a procedure cannot be carried out satisfactorily on a rolling ship therefore our estimates are based on the procedure we used to start each cast, namely to bring the upper part of the probe level with the surface before commencing the downward cast. The pressure offset ranged from -14.8 to -4.0 decibars over the duration of the cruise; the change between casts was generally less than 1.0 decibar. The noise level of the pressure sensor was about 1.5 decibars. This makes it impossible to compute the instantaneous fall speed of the probe, crucial to correcting for sensor response times. This problem is further complicated by the ship's rolling motion which may cause the probe to move upwards for short periods of time during the downcast. We have no algorithm capable of distinguishing between a real upward motion and apparent upward motion caused by noise. The binning procedure during data reduction assumes the error in each depth estimate in the calibrated file is small compared to the desired bin size. Given the error associated with depth, a 1 m bin size is close to the limit of what the software is capable of handling. Efforts are currently underway to develop new algorithms to cope with these difficulties. Refer to a later section on data validation for a comparison between values extracted from the reduced files and data measured independently by bottle samples.

Finally, the Guildline's analog to digital converter had a 'sticky' bit in the suppression section of the word it uses for encoding conductivity. The word length does not have enough bits to cover the entire conductivity range with sufficient accuracy, so the word is split up into a number and a 'suppression' section (4 bits that essentially make up an offset). This problem was dealt with by hand-editing the sections of the cast where it occurred.

4 DATA VALIDATION

Bottle samples were collected and analyzed for temperature and salinity independently from the CTTD casts. Here we compare the results of the two sampling methods.

The temperature versus salinity (T-S) trace for Station 16 is shown in Figure 3. Values from the bottle cast at this station are marked on the Figure with circles. By selecting the T-S trace we have eliminated uncertainty surrounding pressure (depth) for both types of measurement. Figure 3 shows a favourable comparison, especially for points which do not lie in zones of large gradients. It should be noted that the CTTD casts and the bottle samples were **not** collected simultaneously; for Station 16 the time difference was over 4 hours.

To quantify the intercomparison, depths were chosen where there were minimal gradients in the water property (T or S) being compared (Stations 16, 17 and 41). The property difference $\Delta = X_{bottle} - X_{CTTD}$ was calculated for each point (S, and T) with the following results:

$$\bar{\Delta}_{Sal} \pm s_{\Delta}(n) = -0.053 \pm 0.032(28)$$

$$\bar{\Delta}_{T} \pm s_{\Delta}(n) = 0.001 \pm 0.040,(17)$$

Units for salinity are in parts per thousand, and for temperature, Centigrade degrees; s refers to standard deviation, and n to the number of points at which Δ could be confidently calculated.

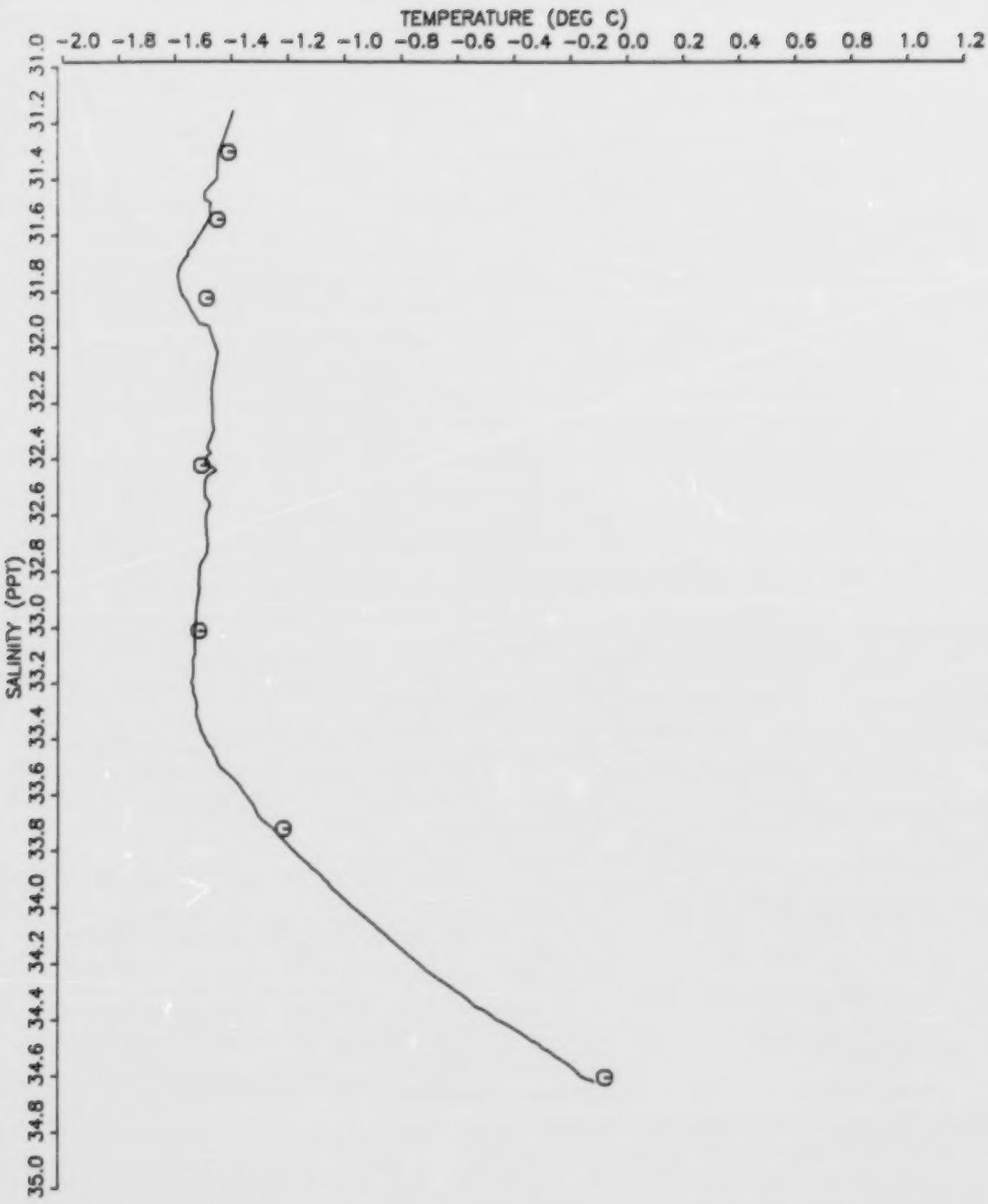

Figure 3: CTTD Bottlecast Intercomparison STATION 16

These calculations imply a salinity offset in the CTTD of about 0.05 parts per thousand relative to the bottle data, the latter being referenced to IAPSO water [*Macdonald et al.*: 1988]. Since such an offset is outside the performance capabilities of the Guildline it implies a possible miscalibration. Fortunately, a similar check on salinity difference for surface samples is viable since at most stations the top 10m of the water column was relatively uniform (vertically) in its properties. This comparison yielded the following statistics for salinity;

$$\bar{\Delta}_{Sal} \pm s_{\Delta}(n) = -0.004 \pm 0.14, (30)$$

The standard deviation is higher for the surface comparison as might be expected since water properties are more variable with time; however, we conclude from the surface data that the salinity measured by the CTTD is, within the relevant error ($s_{\Delta} = 0.025$), unbiased with respect to the bottle data. The offset of 0.05 parts per thousand observed in deeper samples (i.e. salinities greater than 30 parts per thousand which comprised almost all of the samples compared at Stations 16, 17 and 41) could be caused by a difference of about 5% between the depth measured by the wire and by the probe; from our previous knowledge of the pressure sensor, we believe this to be the source of the problem. Temperature measurements by the two methods appear to agree no matter how the comparison is made.

Error (noise) in the CTTD measurement can be estimated by assuming the usual rule that variances add:

$$s_{\Delta}^2 = s_{bottle}^2 + s_{CTTD}^2$$

Using the standard deviations calculated for the bottle data [*Macdonald et al.*: 1988] we estimate for the CTTD salinity measurements, $s \approx 0.03$ parts per thousand, and for temperature, $s \approx 0.03$ Centigrade degrees. Keeping in mind that the bottle cast and the CTTD data were not collected at identical space/time coordinates this estimate of error also includes an environmental component and therefore overestimates the 'best-case' error. It does not, however, include error which arises in steep property gradients where both sensor response and flushing times are long relative to environmental changes experienced by the instrument during its descent.

5 References

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6 APPENDIX; DATA TABLES AND PLOTS

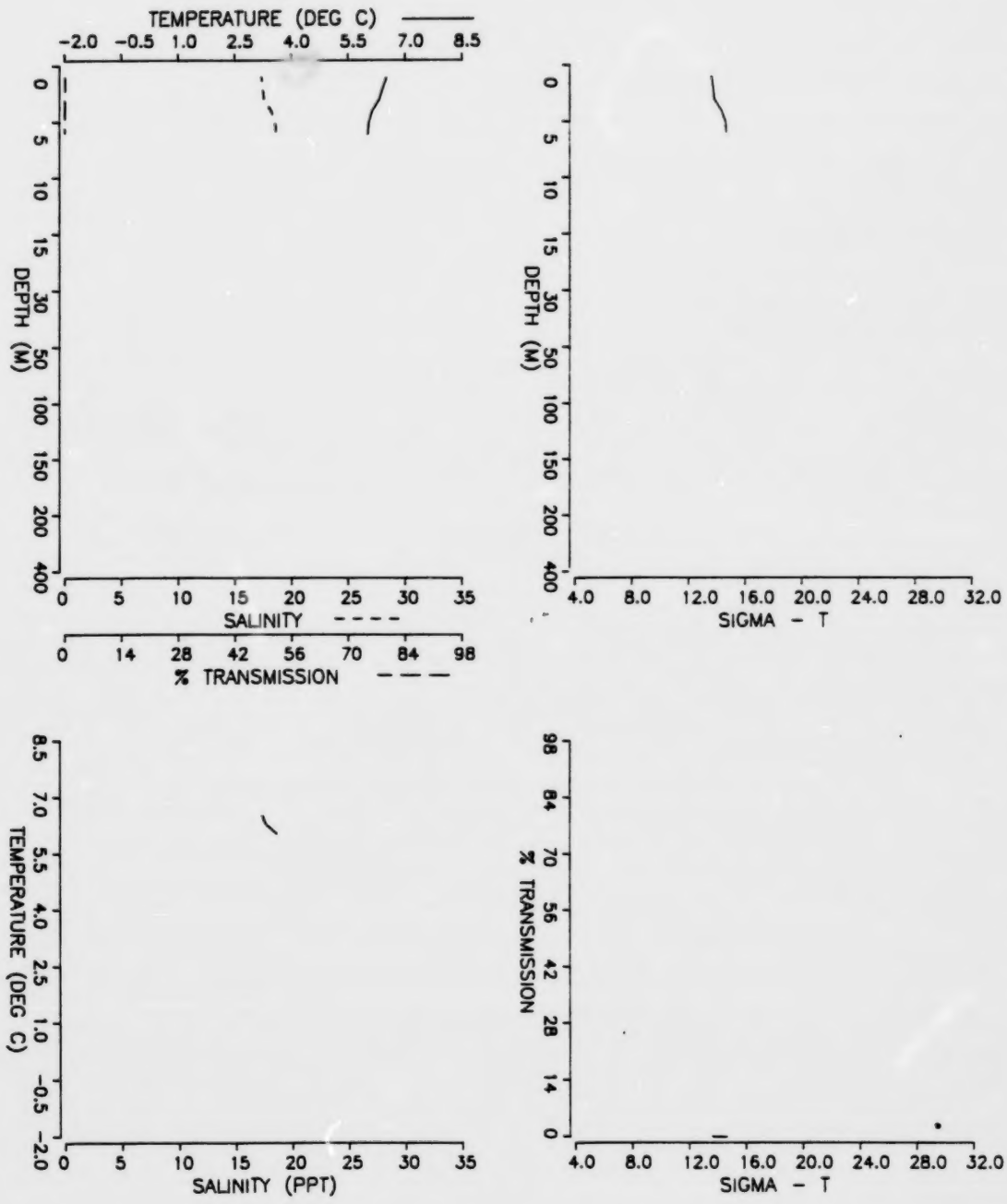
Units and abbreviations used in the computer listings which are included in the following appendix are summarized below.

Measurement	Abbreviation	Units
DEPTH	DEPTH	METRES (M)
TEMPERATURE	TEMP	DEGREES CENTIGRADE (DEG C)
SALINITY	SALN	PARTS PER THOUSAND (PPT)
TRANSMISSION	TRNS	PERCENT (%)
LIGHT ATTENUATION	ATTN	1/METRE (1/M)
DENSITY†	SIGT	KILOGRAM/METRE^3 (KG/M^3)
DEPARTURE FROM FREEZING	T-Tf	CENTIGRADE DEGREES (DEG C)
DYNAMIC HEIGHT ANOMALY	DYN HT	METRES (M)

† The quantity reported for density is actually $\gamma(S,t,0)$ [UNESCO, 1987].

STATION	LAT	LONG	DATE
1	69 38.2 N	133 17.5 W	14:51 GMT ON 10/09/ 86

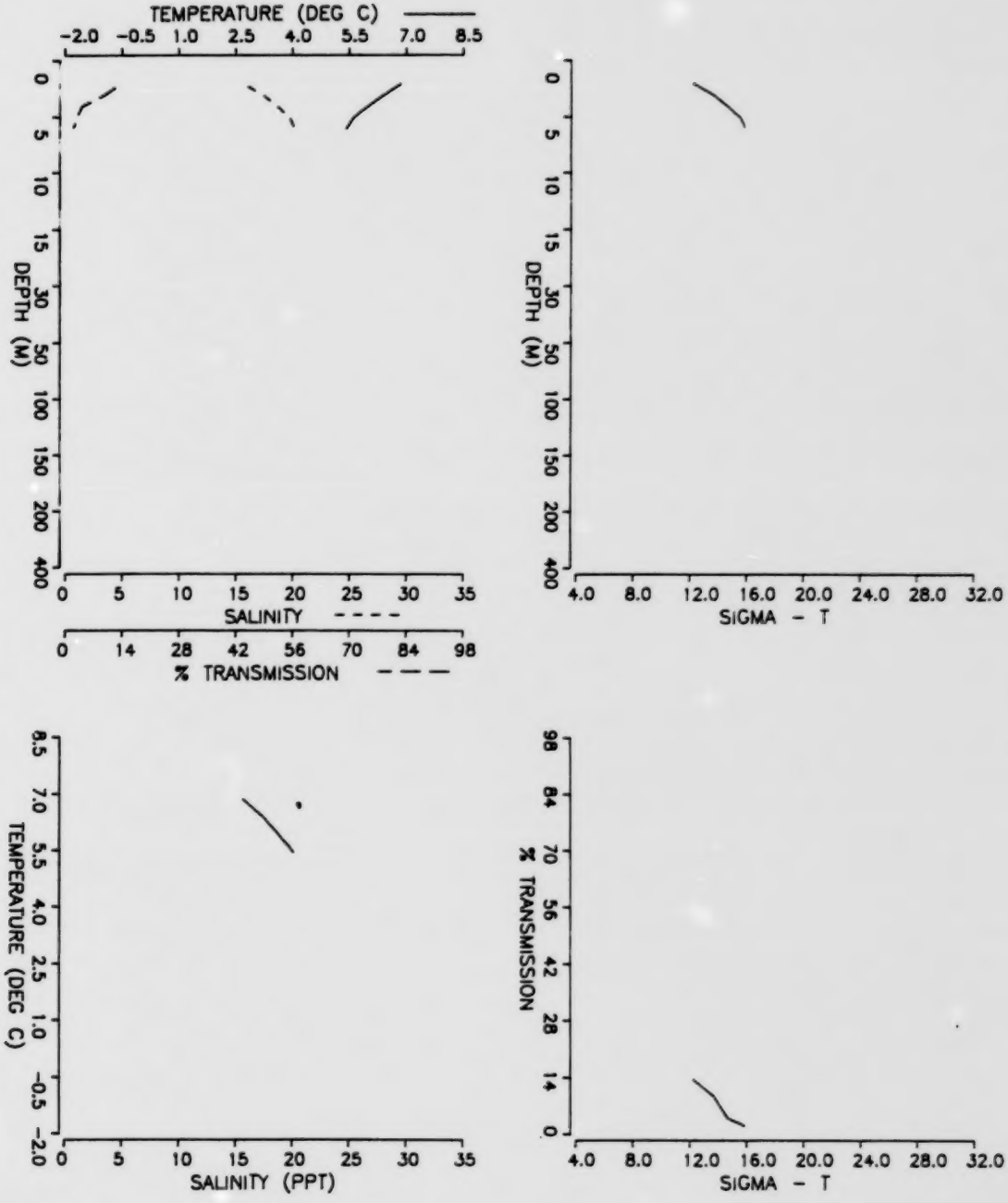
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.53	17.44	0.1	26.50	13.66	7.47	0.14
2.0	6.42	17.56	0.1	26.63	13.77	7.37	0.28
3.0	6.33	17.65	0.0	30.65	13.85	7.29	0.42
4.0	6.15	18.29	0.0	30.91	14.37	7.14	0.55
5.0	6.06	18.67	0.0	30.91	14.67	7.08	0.69
6.0	6.04	18.74	0.0	30.91	14.73	7.05	0.82



STATION 1 CAST # 5900 DATE : 14:51 ON 10/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 38.20 N LONG : 133 17.50 W

STATION	LAT	LONG	DATE
2	69 44.0 N	133 18.8 W	17:11 GMT ON 10/09/ 86

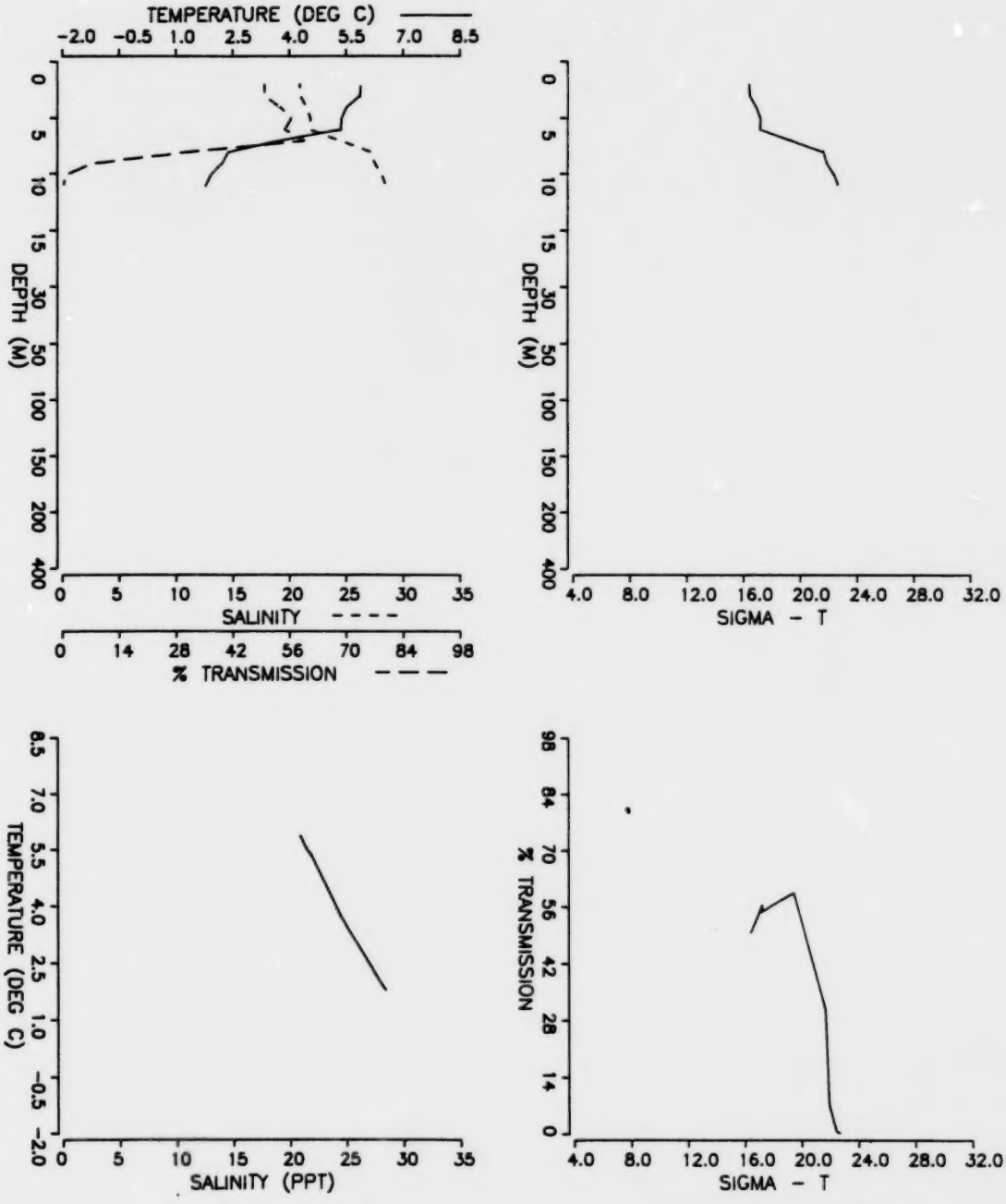
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.89	15.74	13.7	7.95	12.30	7.74	0.31
3.0	6.43	17.45	9.7	9.34	13.68	7.38	0.45
4.0	6.02	18.70	4.2	12.71	14.70	7.03	0.59
5.0	5.63	19.78	2.8	14.25	15.59	6.70	0.71
6.0	5.44	20.26	2.0	15.57	15.97	6.54	0.83



STATION 2 CAST # 5901 DATE : 17:11 ON 10/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 44.00 N LONG : 133 18.80 W

STATION	LAT	LONG	DATE
3	69 50.1 N	133 21.0 W	19:47 GMT ON 10/09/ 86

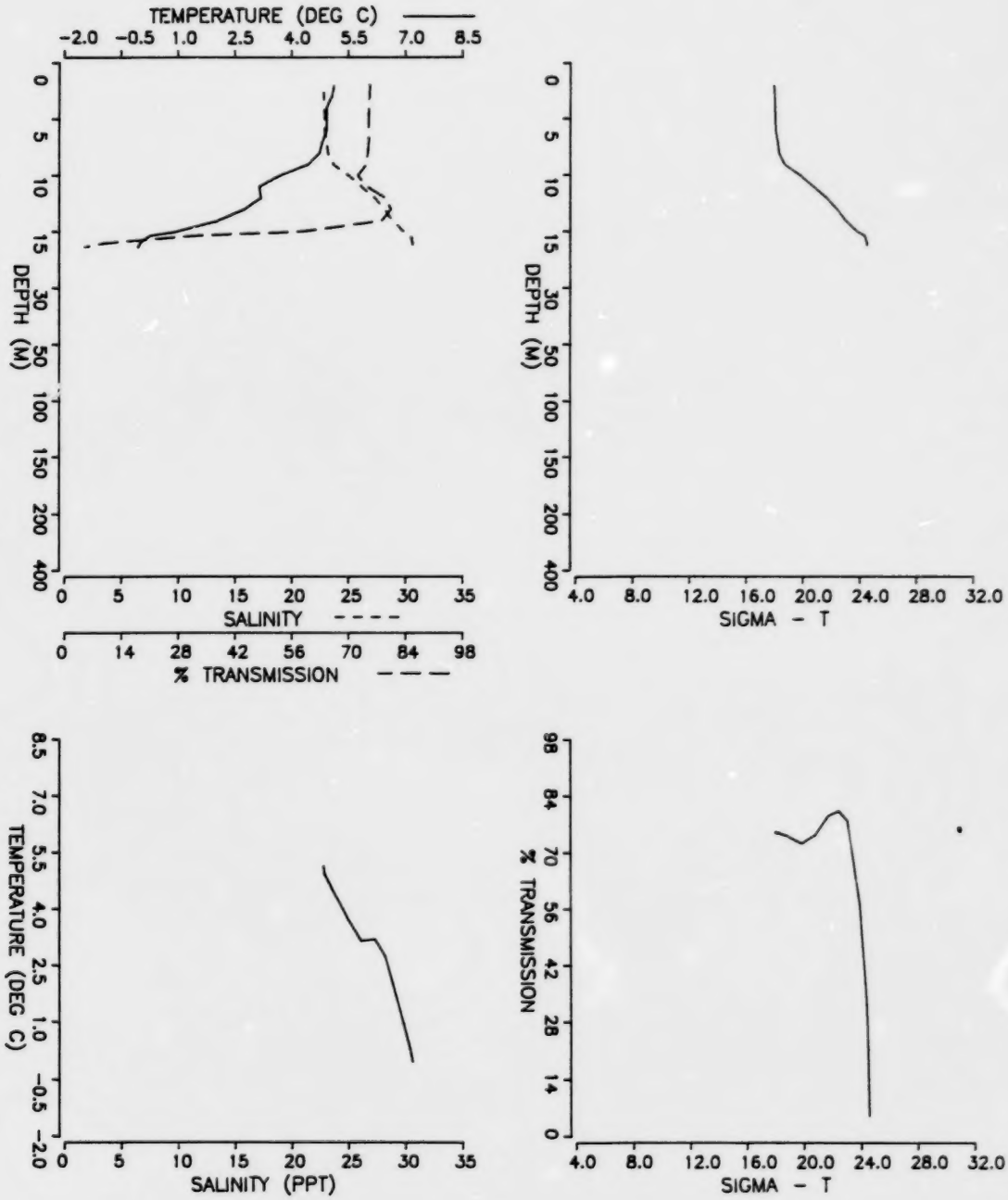
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.89	20.98	50.0	2.77	16.50	7.03	0.22
3.0	5.88	21.00	50.0	2.77	16.52	7.02	0.34
4.0	5.52	21.56	53.8	2.48	17.00	6.69	0.45
5.0	5.39	21.93	56.5	2.29	17.30	6.58	0.55
6.0	5.38	21.92	55.0	2.39	17.29	6.57	0.66
7.0	3.73	24.57	59.6	2.07	19.52	5.07	0.75
8.0	2.40	27.25	30.8	4.72	21.74	3.89	0.82
9.0	2.22	27.54	7.2	10.50	21.99	3.73	0.88
10.0	1.94	28.14	0.8	19.38	22.49	3.48	0.94
11.0	1.79	28.52	0.3	23.02	22.79	3.36	0.99



STATION 3 CAST # 5902 DATE : 19:47 ON 10/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 50.10 N LONG : 133 21.00 W

STATION	LAT	LONG	DATE
4	69 55.2 N	133 23.2 W	01:16 GMT ON 11/09/ 86

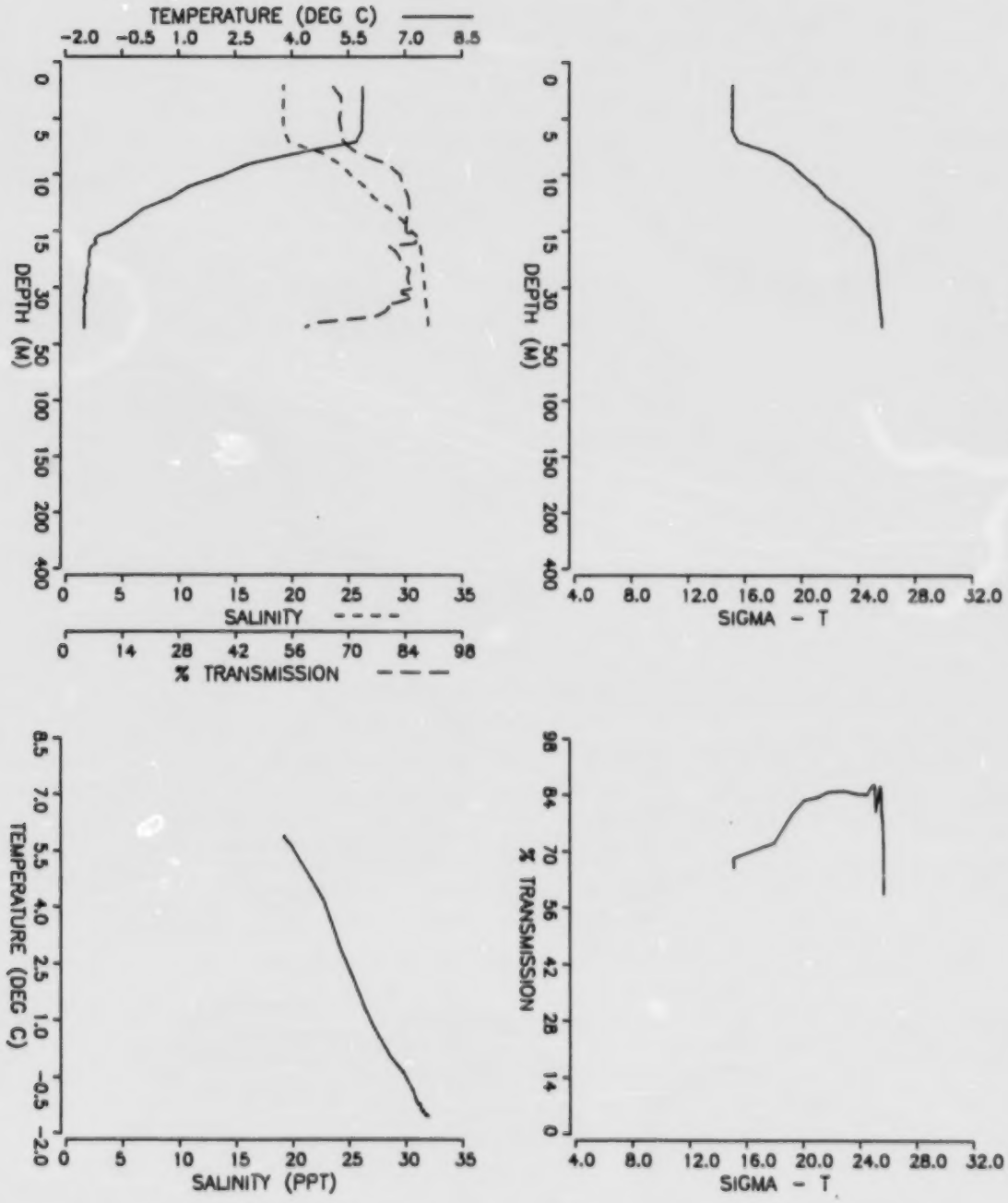
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.14	22.86	75.3	1.13	18.06	6.38	0.19
3.0	5.07	22.89	75.2	1.14	18.09	6.32	0.29
4.0	4.94	22.92	75.1	1.15	18.12	6.18	0.39
5.0	4.94	22.95	75.0	1.15	18.15	6.19	0.48
6.0	4.94	22.97	75.0	1.15	18.16	6.19	0.58
7.0	4.83	23.16	75.1	1.15	18.32	6.09	0.67
8.0	4.75	23.26	74.9	1.16	18.41	6.02	0.77
9.0	4.45	23.76	74.5	1.18	18.82	5.75	0.86
10.0	3.70	25.08	72.4	1.29	19.92	5.07	0.94
12.0	3.21	27.34	79.1	0.94	21.76	4.71	1.08
14.0	2.02	28.93	78.1	0.99	23.11	3.61	1.19
16.0	0.29	30.43	33.5	4.37	24.41	1.96	1.27
18.0	-0.01	30.64	9.4	9.48	24.59	1.68	1.34
19.0	-0.05	30.68	4.9	12.09	24.62	1.64	1.38



STATION 4 CAST # 5904 DATE : 01:16 ON 11/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 55.20 N LONG : 133 23.20 W

STATION	LAT	LONG	DATE
7	70 12.8 N	133 33.6 W	19:20 GMT ON 11/09/ 86

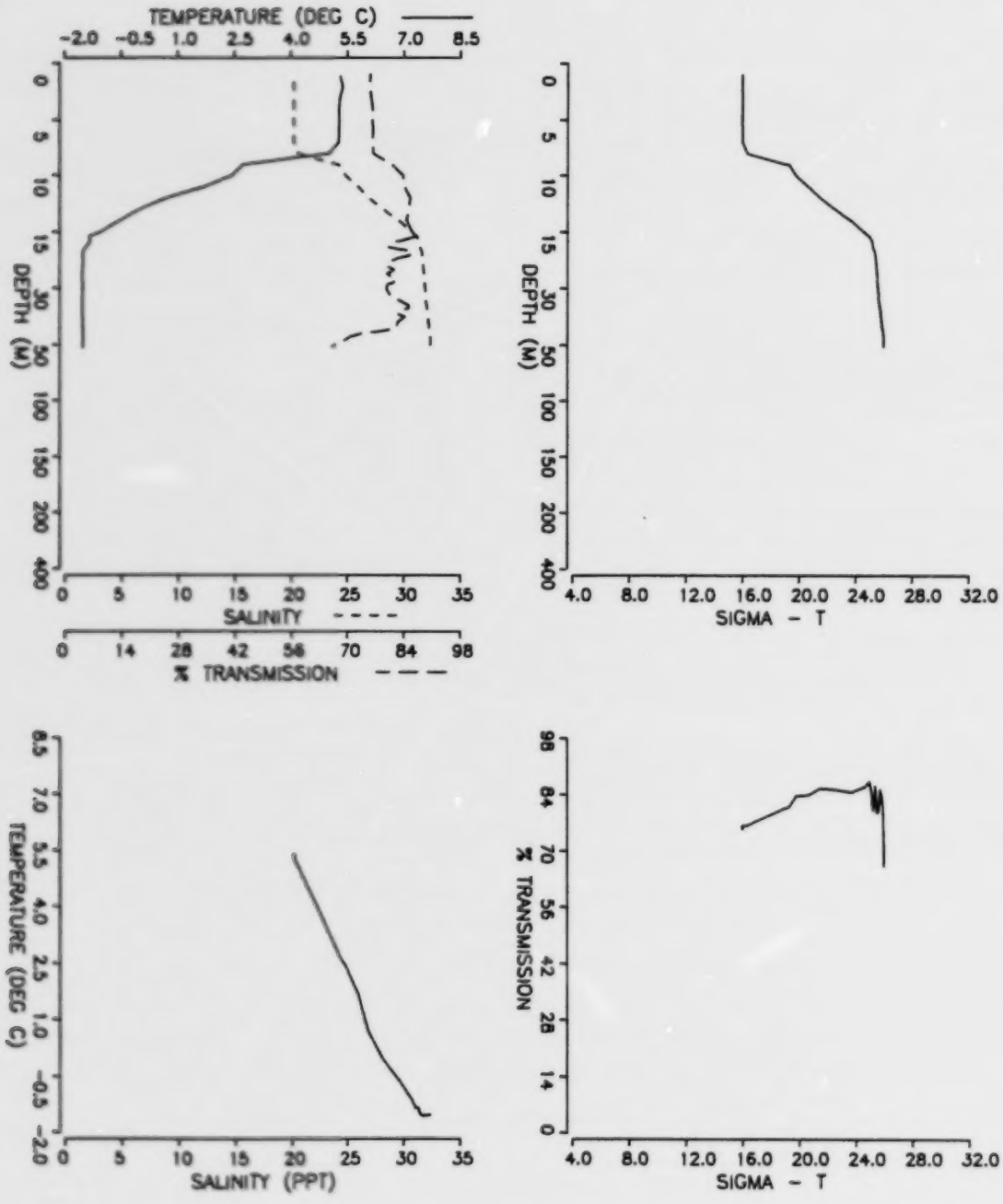
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.89	19.33	66.1	1.65	15.20	6.94	0.25
3.0	5.90	19.32	68.3	1.53	15.20	6.95	0.37
4.0	5.89	19.32	68.4	1.52	15.20	6.94	0.50
5.0	5.88	19.32	67.9	1.55	15.20	6.93	0.62
6.0	5.88	19.32	68.4	1.52	15.20	6.93	0.75
7.0	5.71	19.84	69.0	1.49	15.62	6.79	0.87
8.0	4.21	22.76	72.2	1.30	18.05	5.45	0.98
9.0	2.86	24.34	79.7	0.91	19.40	4.19	1.07
10.0	2.18	25.30	82.8	0.75	20.20	3.57	1.15
12.0	0.80	27.27	84.8	0.66	21.84	2.29	1.29
14.0	-0.35	29.79	84.4	0.68	23.91	1.29	1.39
16.0	-1.13	30.98	86.1	0.60	24.90	0.58	1.45
18.0	-1.18	31.28	86.7	0.57	25.14	0.54	1.51
20.0	-1.36	31.40	81.4	0.83	25.24	0.37	1.57
22.0	-1.38	31.48	82.7	0.76	25.31	0.36	1.62
24.0	-1.35	31.54	83.6	0.71	25.36	0.39	1.68
26.0	-1.43	31.61	84.9	0.65	25.42	0.32	1.73
28.0	-1.43	31.64	84.6	0.67	25.45	0.32	1.78
30.0	-1.49	31.71	86.2	0.59	25.50	0.27	1.83
35.0	-1.49	31.83	82.7	0.76	25.60	0.28	1.95
40.0	-1.51	31.96	76.9	1.05	25.70	0.27	2.07
44.0	-1.51	32.02	59.2	2.10	25.75	0.28	2.16


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION 7 CAST # 5905 DATE : 19:20 ON 11/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 12.80 N LONG : 133 33.60 W

STATION	LAT	LONG	DATE
9	70 23.2 N	133 46.0 W	00:43 GMT ON 11/09/ 86

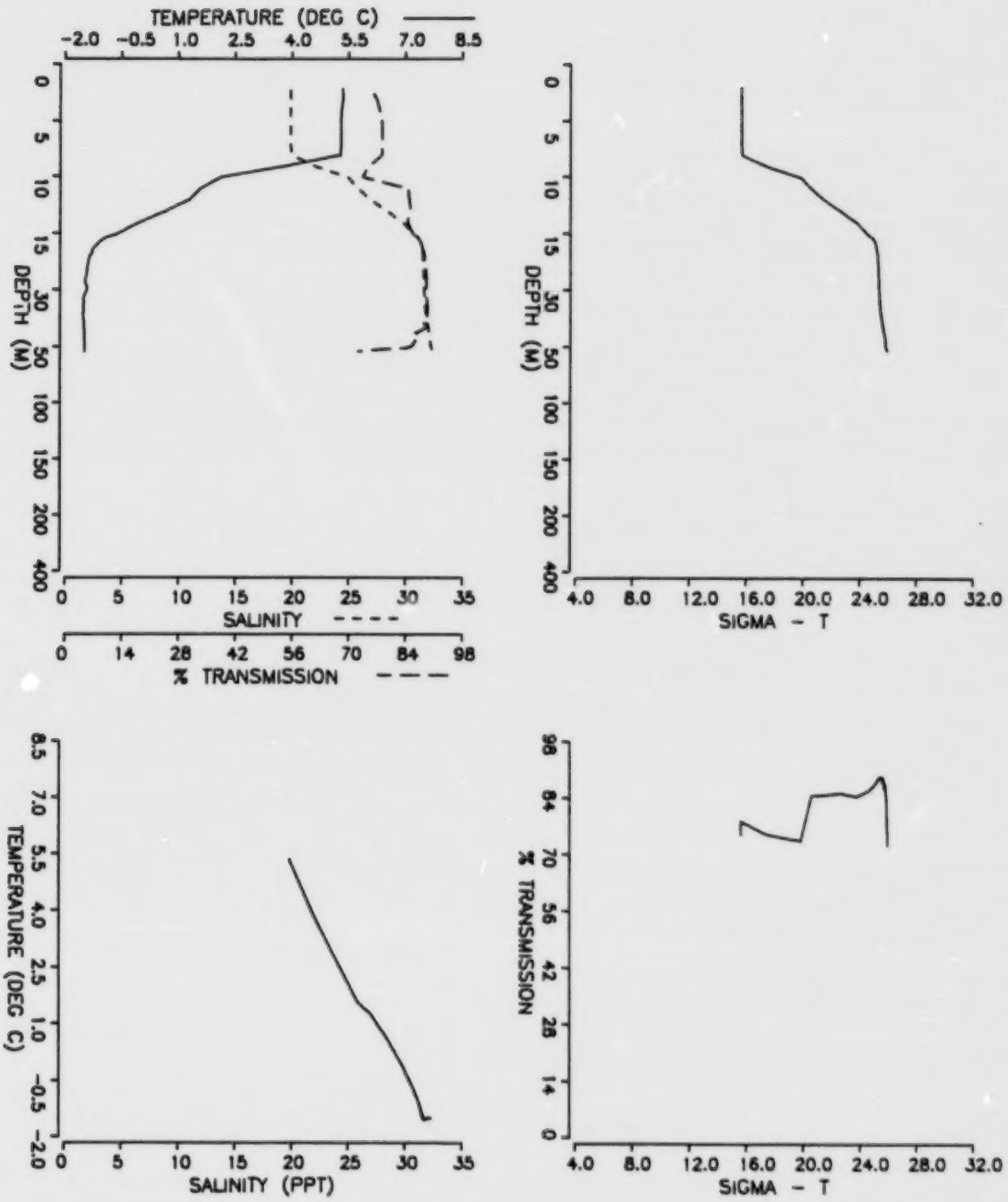
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.32	20.33	75.7	1.11	16.04	6.42	0.12
2.0	5.39	20.31	75.6	1.12	16.02	6.49	0.23
3.0	5.31	20.33	75.9	1.10	16.04	6.41	0.35
4.0	5.29	20.32	76.3	1.08	16.04	6.39	0.47
5.0	5.29	20.32	76.2	1.09	16.03	6.40	0.58
6.0	5.28	20.32	76.3	1.08	16.04	6.39	0.70
7.0	5.28	20.33	76.4	1.08	16.04	6.39	0.82
8.0	5.03	20.73	76.5	1.07	16.38	6.16	0.93
9.0	2.74	24.28	81.1	0.84	19.35	4.07	1.03
10.0	2.44	24.92	83.8	0.71	19.88	3.81	1.11
12.0	0.70	26.93	85.7	0.62	21.57	2.17	1.25
14.0	-0.58	29.66	84.7	0.66	23.82	1.05	1.36
16.0	-1.34	31.12	87.4	0.54	25.02	0.37	1.43
18.0	-1.36	31.38	80.8	0.86	25.23	0.37	1.48
20.0	-1.51	31.56	85.3	0.63	25.38	0.23	1.54
22.0	-1.52	31.67	82.4	0.78	25.47	0.23	1.59
24.0	-1.52	31.72	79.9	0.90	25.51	0.23	1.64
26.0	-1.54	31.78	79.9	0.90	25.56	0.22	1.69
28.0	-1.53	31.83	82.2	0.79	25.60	0.23	1.74
30.0	-1.53	31.88	79.7	0.91	25.64	0.24	1.78
35.0	-1.53	31.97	83.8	0.71	25.72	0.24	1.90
40.0	-1.53	32.14	84.2	0.69	25.85	0.26	2.01
45.0	-1.52	32.32	78.6	0.96	26.00	0.28	2.12
50.0	-1.52	32.37	67.0	1.60	26.03	0.29	2.22
52.0	-1.52	32.37	66.1	1.66	26.03	0.29	2.26



STATION 9 CAST # 5906 DATE : 00:43 ON 11/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 23.20 N LONG : 133 46.00 W

STATION	LAT	LONG	DATE
10	70 28.9 N	133 52.8 W	02:17 GMT ON 12/09/ 86

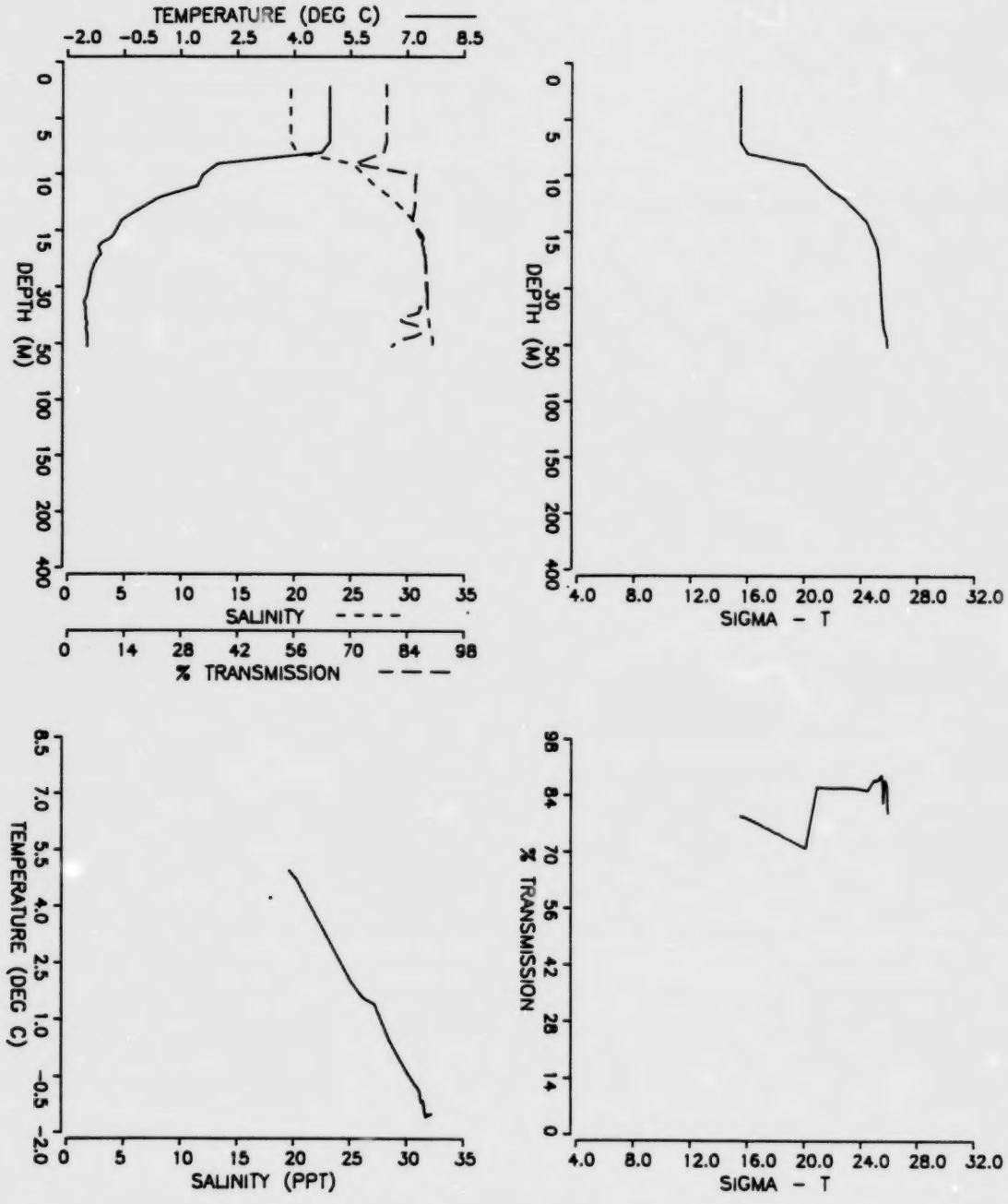
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.36	19.93	75.2	1.14	15.72	6.44	0.24
3.0	5.36	19.92	76.9	1.05	15.72	6.44	0.36
4.0	5.32	19.93	77.7	1.01	15.73	6.40	0.48
5.0	5.31	19.93	78.3	0.98	15.73	6.39	0.60
6.0	5.31	19.93	78.4	0.98	15.73	6.40	0.72
7.0	5.31	19.94	78.3	0.98	15.74	6.39	0.84
8.0	5.29	19.98	78.4	0.98	15.77	6.38	0.96
9.0	3.85	22.07	75.1	1.14	17.52	5.05	1.07
10.0	2.15	24.96	73.5	1.23	19.93	3.51	1.16
12.0	1.29	26.99	84.9	0.65	21.59	2.77	1.30
14.0	-0.05	29.80	84.5	0.67	23.91	1.59	1.40
16.0	-0.94	31.13	87.0	0.56	25.02	0.77	1.47
18.0	-1.17	31.39	88.0	0.51	25.23	0.56	1.53
20.0	-1.29	31.50	88.6	0.48	25.33	0.45	1.58
22.0	-1.38	31.55	88.7	0.48	25.36	0.36	1.64
24.0	-1.41	31.59	89.0	0.46	25.40	0.34	1.69
26.0	-1.44	31.60	89.1	0.46	25.41	0.31	1.74
28.0	-1.47	31.62	89.2	0.46	25.43	0.28	1.79
30.0	-1.43	31.65	89.3	0.45	25.45	0.32	1.84
35.0	-1.51	31.73	89.4	0.45	25.52	0.25	1.97
40.0	-1.51	31.89	89.1	0.46	25.64	0.26	2.09
45.0	-1.49	32.09	86.5	0.58	25.81	0.30	2.20
50.0	-1.48	32.24	85.1	0.65	25.93	0.32	2.31
54.0	-1.48	32.38	72.1	1.31	26.04	0.34	2.39



STATION 10 CAST # 5907 DATE : 02:17 ON 12/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 28.90 N LONG : 133 52.80 W

STATION	LAT	LONG	DATE
11	70 33.5 N	133 59.6 W	05:41 GMT ON 12/09/ 86

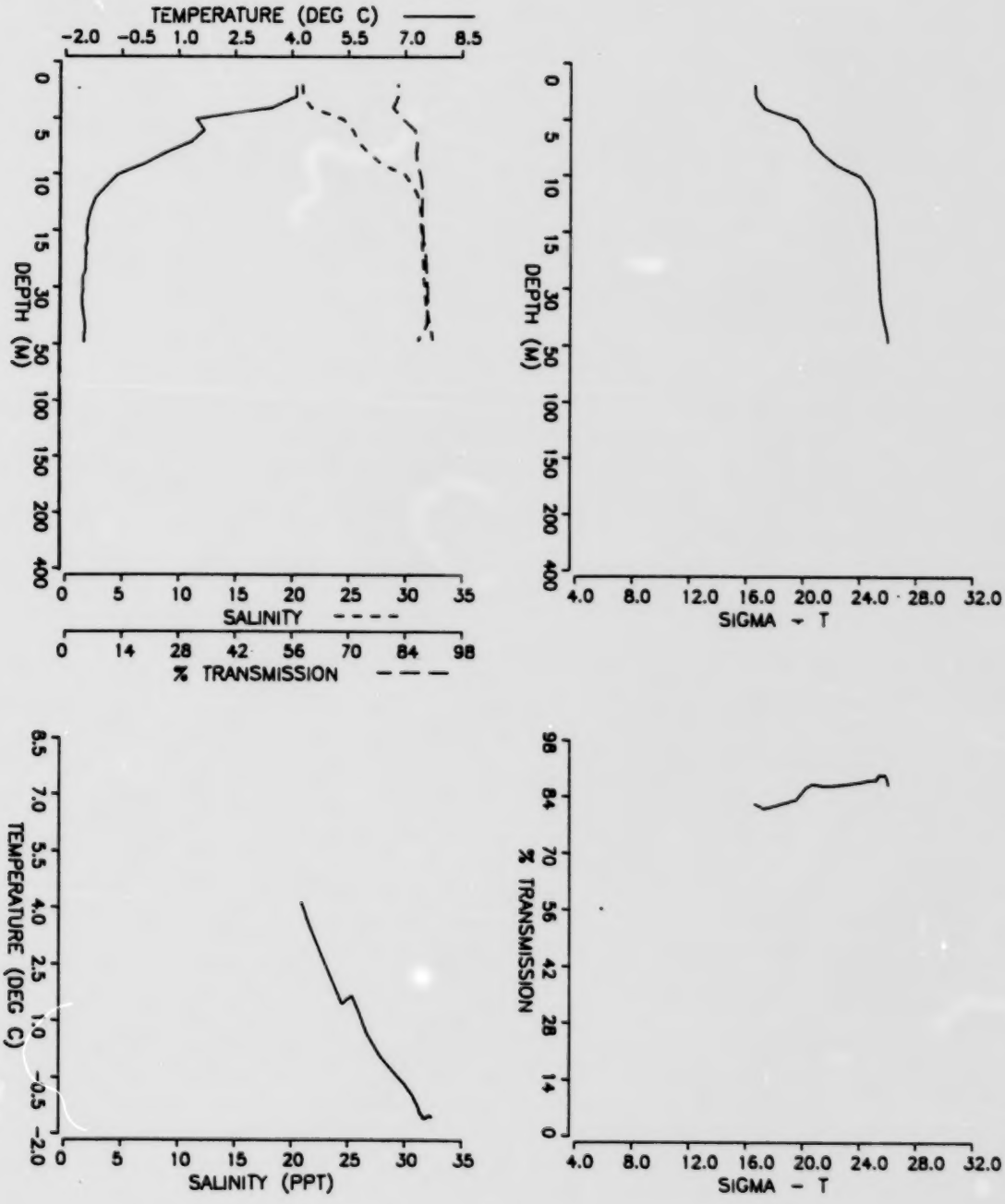
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.95	19.72	78.9	0.95	15.59	6.02	0.24
3.0	4.95	19.72	78.9	0.95	15.59	6.02	0.36
4.0	4.95	19.72	78.9	0.95	15.59	6.02	0.48
5.0	4.95	19.72	78.9	0.95	15.59	6.02	0.61
6.0	4.95	19.72	78.9	0.95	15.59	6.03	0.73
7.0	4.95	19.72	78.9	0.95	15.59	6.03	0.85
8.0	4.74	20.33	78.3	0.98	16.08	5.85	0.97
9.0	1.98	25.23	70.9	1.37	20.16	3.35	1.06
10.0	1.59	26.23	86.2	0.60	20.97	3.03	1.14
12.0	0.43	28.58	86.0	0.60	22.91	1.99	1.26
14.0	-0.56	30.51	85.3	0.64	24.50	1.11	1.34
16.0	-0.80	31.07	87.7	0.52	24.96	0.91	1.40
18.0	-1.09	31.29	87.6	0.53	25.15	0.64	1.46
20.0	-1.16	31.46	88.2	0.50	25.29	0.58	1.52
22.0	-1.20	31.54	88.5	0.49	25.36	0.54	1.57
24.0	-1.31	31.60	88.6	0.49	25.40	0.44	1.62
26.0	-1.37	31.62	88.7	0.48	25.43	0.37	1.67
28.0	-1.42	31.65	88.7	0.48	25.45	0.34	1.73
30.0	-1.45	31.68	88.9	0.47	25.48	0.30	1.78
35.0	-1.56	31.75	89.0	0.46	25.54	0.20	1.90
40.0	-1.52	31.85	84.2	0.69	25.61	0.25	2.02
45.0	-1.51	32.04	87.9	0.52	25.77	0.28	2.14
50.0	-1.48	32.26	80.8	0.85	25.94	0.33	2.24
52.0	-1.48	32.29	79.9	0.90	25.97	0.33	2.29



STATION 11 CAST # 5908 DATE : 05:41 ON 12/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 33.50 N LONG : 133 59.60 W

STATION	LAT	LONG	DATE
12	70 39.0 N	134 6.0 W	07:06 GMT ON 12/09/ 86

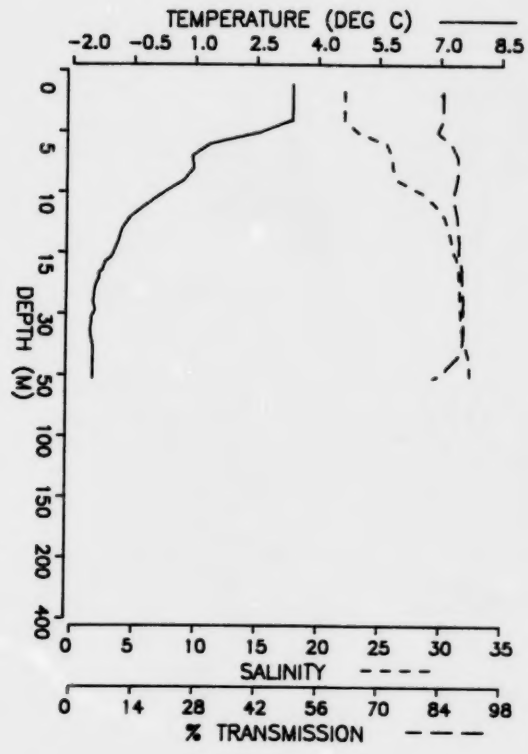
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.13	20.96	82.3	0.78	16.63	5.27	0.22
3.0	4.13	21.01	82.3	0.78	16.66	5.27	0.33
4.0	3.47	21.76	81.0	0.84	17.31	4.65	0.44
5.0	1.47	24.54	83.3	0.73	19.62	2.81	0.53
6.0	1.68	25.42	86.3	0.59	20.32	3.07	0.61
7.0	1.35	25.89	87.1	0.55	20.71	2.76	0.68
8.0	0.66	26.76	86.7	0.57	21.44	2.13	0.75
9.0	0.09	27.94	86.9	0.56	22.41	1.62	0.81
10.0	-0.62	29.97	87.7	0.53	24.07	1.02	0.86
12.0	-1.20	31.16	88.2	0.50	25.05	0.51	0.93
14.0	-1.41	31.38	88.1	0.51	25.23	0.32	0.98
16.0	-1.43	31.43	88.4	0.49	25.27	0.30	1.04
18.0	-1.43	31.48	88.6	0.48	25.31	0.31	1.09
20.0	-1.46	31.52	88.9	0.47	25.34	0.27	1.14
22.0	-1.47	31.55	89.0	0.47	25.37	0.28	1.20
24.0	-1.47	31.58	89.1	0.46	25.39	0.28	1.25
26.0	-1.49	31.61	89.2	0.46	25.42	0.26	1.30
28.0	-1.55	31.64	89.3	0.45	25.44	0.20	1.35
30.0	-1.55	31.67	89.4	0.45	25.47	0.21	1.40
35.0	-1.56	31.80	89.5	0.44	25.57	0.21	1.53
40.0	-1.52	32.00	89.4	0.45	25.74	0.26	1.64
45.0	-1.48	32.28	88.8	0.48	25.96	0.32	1.75
49.0	-1.51	32.42	87.0	0.56	26.08	0.30	1.83

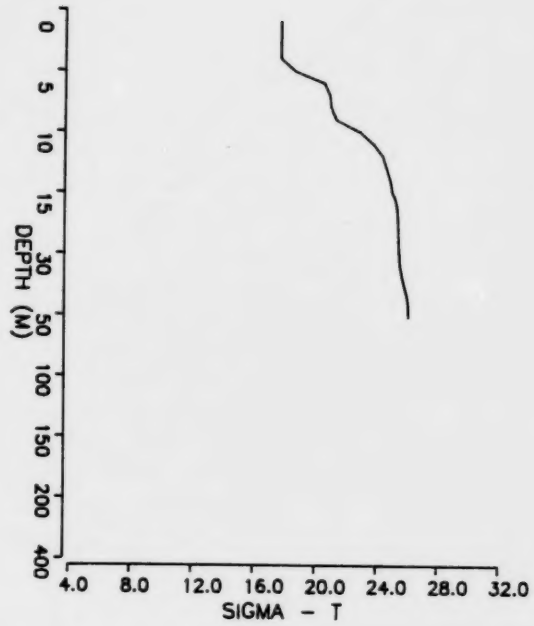


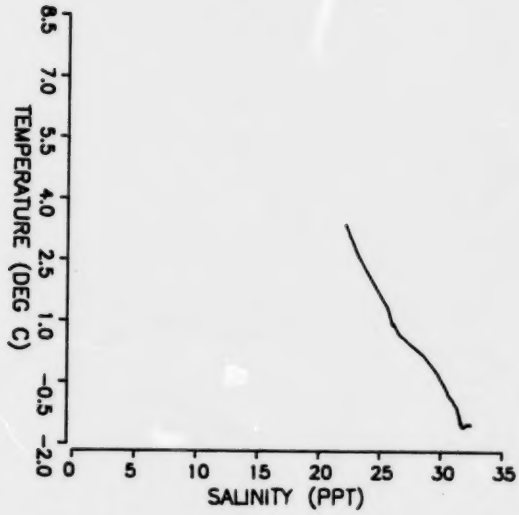
STATION 12 CAST # 5909 DATE : 07:06 ON 12/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 39.00 N LONG : 134 6.00 W

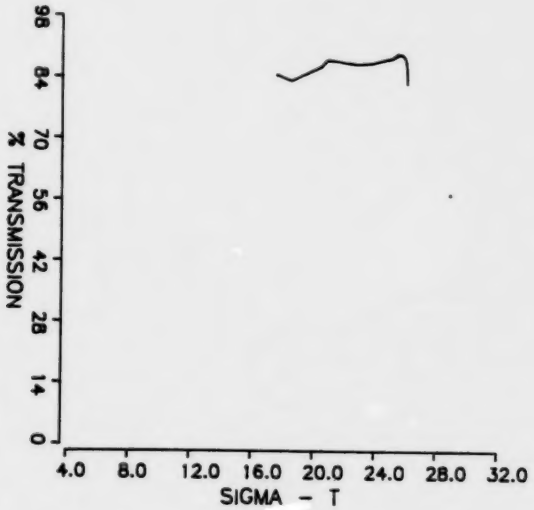
STATION	LAT	LONG	DATE
13	70 44.2 N	134 12.0 W	08:55 GMT ON 12/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	3.39	22.19	84.6	0.67	17.65	4.59	0.10
2.0	3.39	22.18	84.6	0.67	17.65	4.60	0.20
3.0	3.39	22.19	84.6	0.67	17.65	4.60	0.30
4.0	3.38	22.19	84.6	0.67	17.65	4.59	0.40
5.0	2.60	23.27	83.3	0.73	18.55	3.87	0.50
6.0	1.36	25.64	86.5	0.58	20.51	2.76	0.58
7.0	0.94	26.06	87.9	0.51	20.87	2.36	0.65
8.0	0.97	26.16	88.1	0.51	20.94	2.40	0.72
9.0	0.73	26.60	87.9	0.51	21.31	2.18	0.79
10.0	0.23	28.52	87.2	0.55	22.87	1.79	0.85
12.0	-0.58	30.35	87.9	0.52	24.38	1.09	0.93
14.0	-0.88	30.96	88.4	0.49	24.88	0.82	1.00
16.0	-1.06	31.33	88.6	0.49	25.19	0.66	1.06
18.0	-1.23	31.48	88.9	0.47	25.31	0.51	1.11
20.0	-1.36	31.55	89.0	0.47	25.37	0.38	1.17
22.0	-1.39	31.60	89.1	0.46	25.40	0.35	1.22
24.0	-1.45	31.61	89.3	0.45	25.42	0.29	1.27
26.0	-1.48	31.64	89.4	0.45	25.44	0.27	1.32
28.0	-1.46	31.67	89.3	0.45	25.47	0.30	1.37
30.0	-1.48	31.71	89.3	0.45	25.50	0.27	1.42
35.0	-1.55	31.84	89.5	0.45	25.60	0.22	1.55
40.0	-1.48	32.13	89.2	0.46	25.84	0.31	1.66
45.0	-1.48	32.39	87.2	0.55	26.06	0.32	1.76
50.0	-1.49	32.47	84.0	0.70	26.12	0.32	1.86
52.0	-1.49	32.48	82.3	0.78	26.12	0.33	1.90





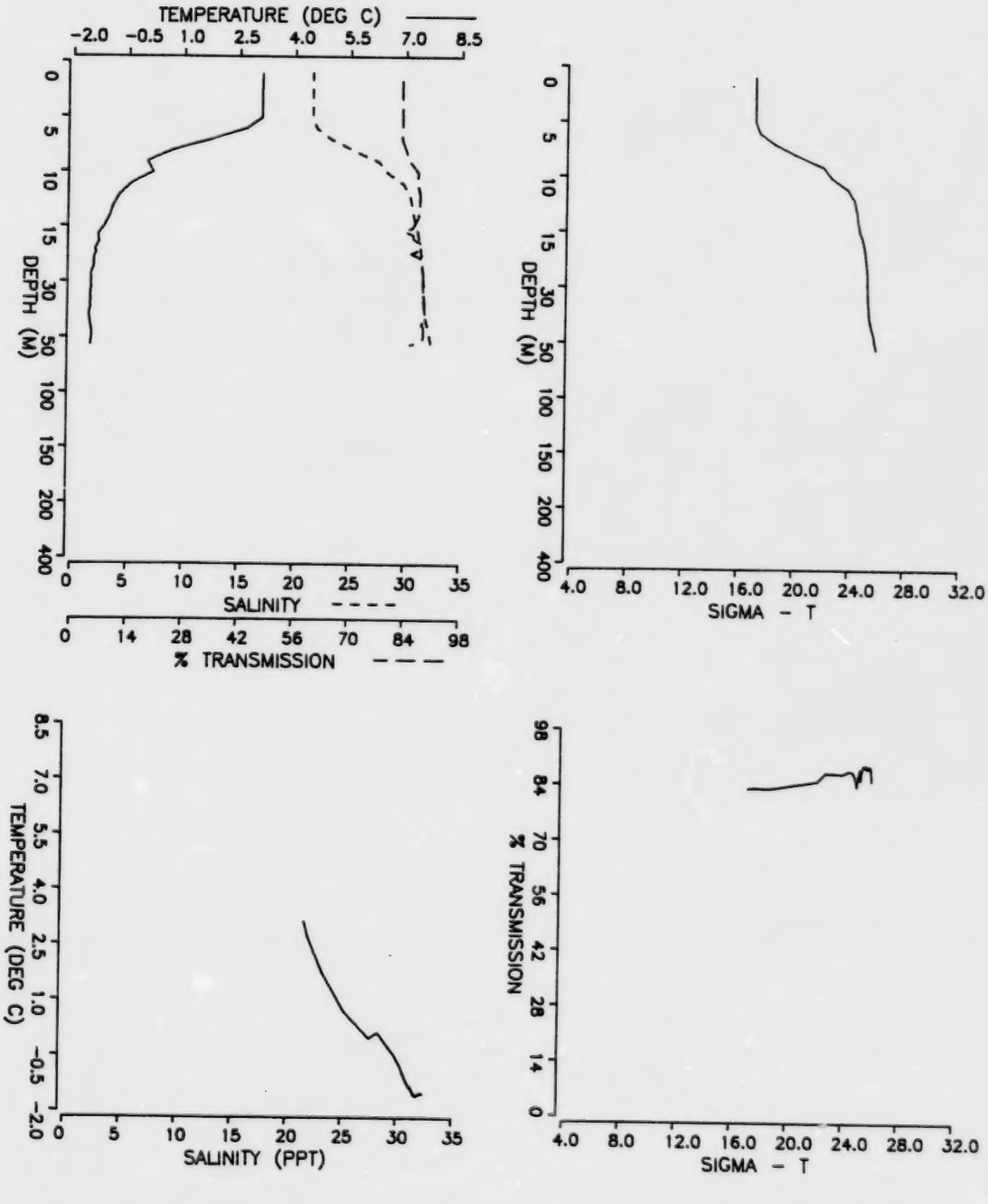




STATION 13 CAST # 5910 DATE : 08:55 ON 12/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 44.20 N LONG : 134 12.00 W

STATION	LAT	LONG	DATE
14	70 49.2 N	134 18.0 W	10:33 GMT ON 12/09/ 86

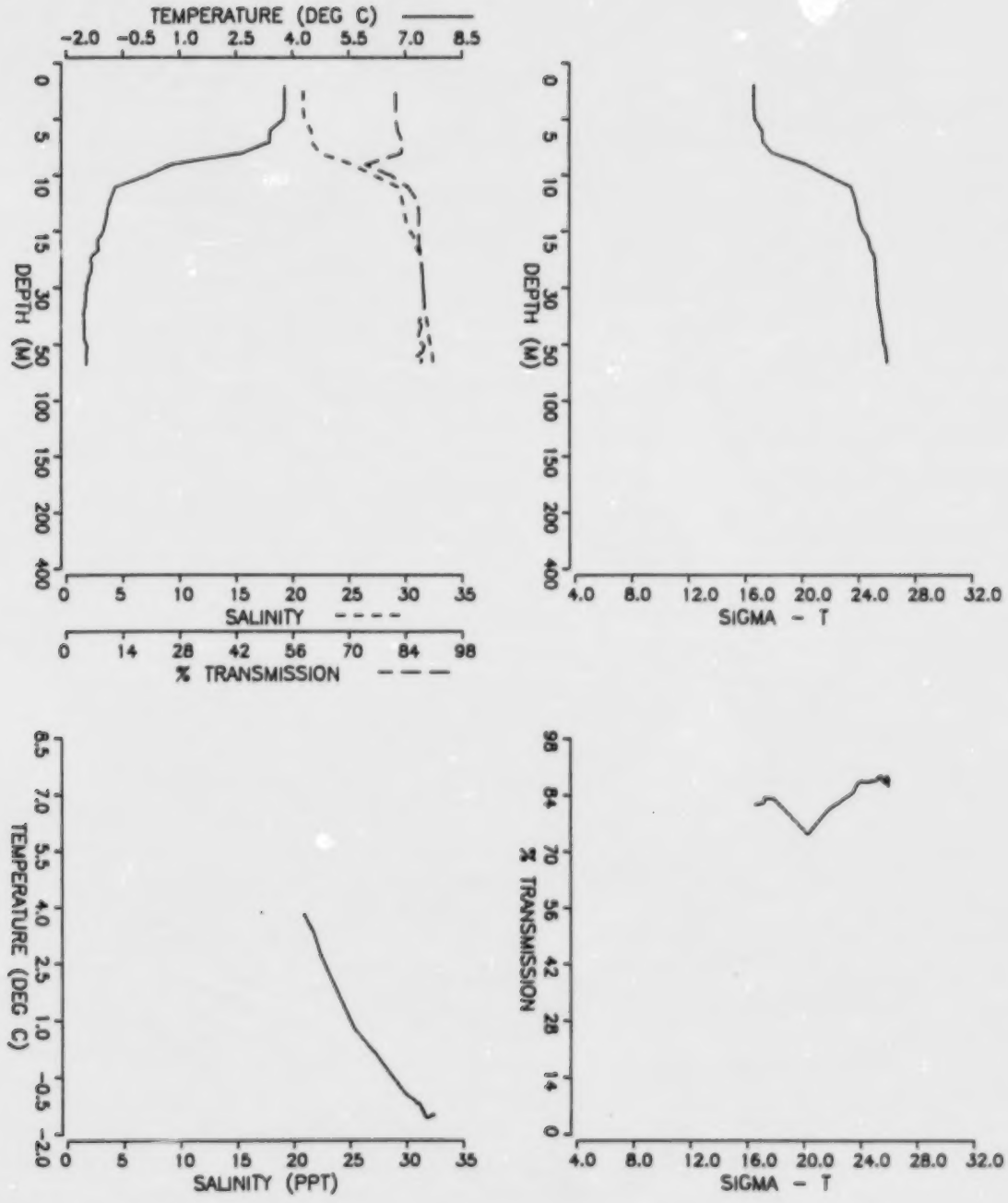
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	3.12	21.61	83.0	0.74	17.21	4.30	0.11
2.0	3.12	21.61	83.0	0.74	17.21	4.29	0.21
3.0	3.11	21.61	83.1	0.74	17.21	4.29	0.32
4.0	3.11	21.61	83.1	0.74	17.21	4.29	0.42
5.0	3.11	21.61	83.1	0.74	17.21	4.29	0.53
6.0	2.71	21.99	83.1	0.74	17.53	3.90	0.63
7.0	1.74	23.36	83.1	0.74	18.67	3.01	0.73
8.0	0.72	25.34	84.0	0.70	20.30	2.10	0.81
9.0	0.01	27.61	85.1	0.65	22.14	1.52	0.88
10.0	0.16	28.38	87.2	0.55	22.76	1.72	0.93
12.0	-0.73	30.38	87.7	0.52	24.41	0.93	1.01
14.0	-1.02	30.75	87.3	0.54	24.71	0.67	1.08
16.0	-1.25	31.11	83.7	0.71	25.01	0.46	1.14
18.0	-1.31	31.25	86.1	0.60	25.12	0.42	1.20
20.0	-1.33	31.37	88.1	0.51	25.22	0.40	1.26
22.0	-1.36	31.43	85.5	0.63	25.27	0.37	1.31
24.0	-1.43	31.50	88.1	0.51	25.33	0.31	1.37
26.0	-1.44	31.56	88.3	0.50	25.37	0.30	1.42
28.0	-1.51	31.59	88.5	0.49	25.40	0.24	1.47
30.0	-1.50	31.61	88.6	0.48	25.42	0.25	1.52
35.0	-1.52	31.67	88.7	0.48	25.47	0.24	1.65
40.0	-1.53	31.77	88.9	0.47	25.55	0.23	1.78
45.0	-1.51	32.01	88.2	0.50	25.74	0.27	1.89
50.0	-1.48	32.28	88.7	0.48	25.96	0.33	2.00
55.0	-1.50	32.39	85.5	0.63	26.05	0.32	2.10
56.0	-1.50	32.41	85.2	0.64	26.07	0.32	2.12



STATION 14 CAST # 5911 DATE : 10:33 ON 12/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 49.20 N LONG : 134 18.00 W

STATION	LAT	LONG	DATE
15	70 54.6 N	134 24.8 W	11:32 GMT ON 12/09/ 86

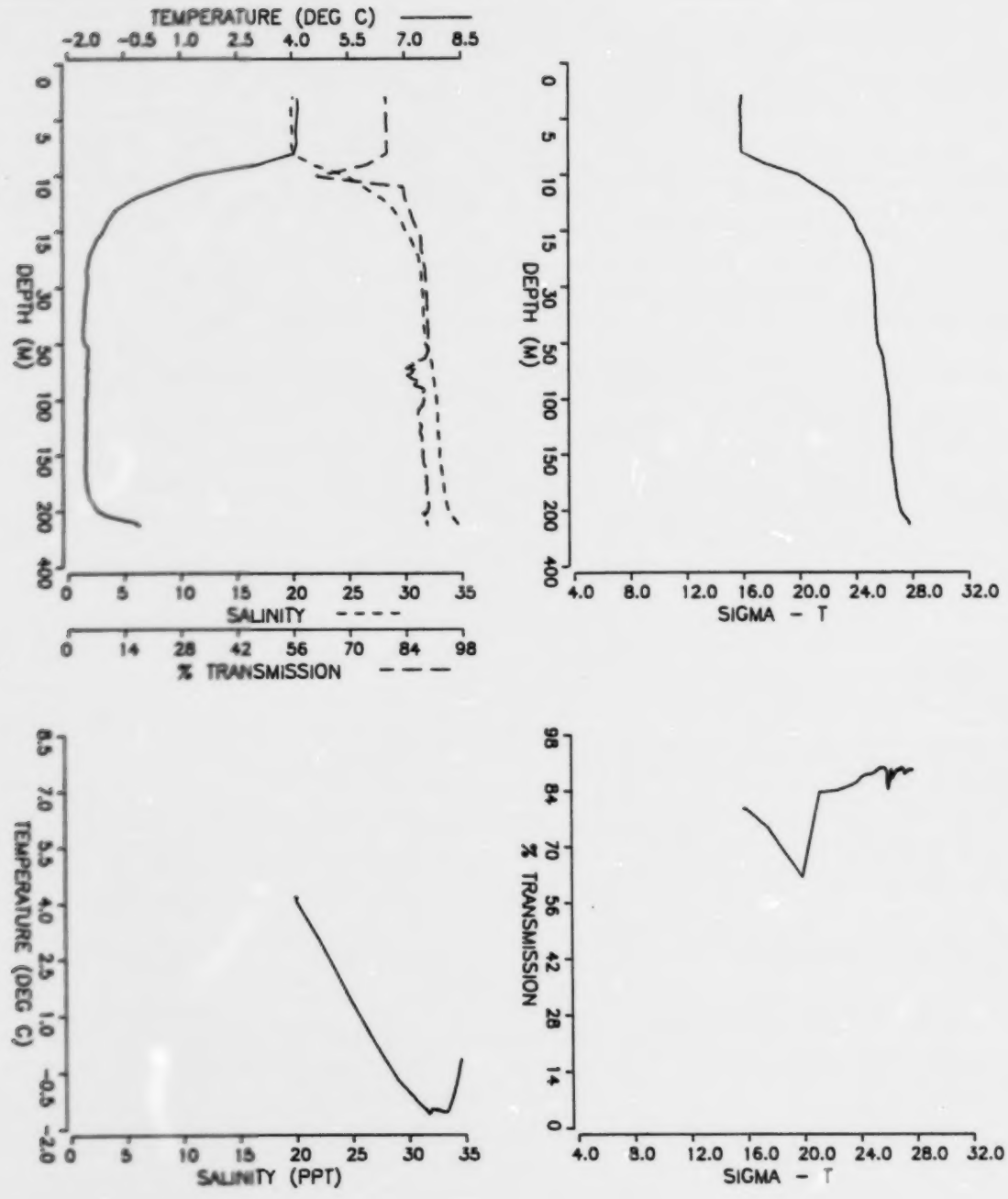
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	3.81	21.02	81.7	0.81	16.70	4.95	0.22
3.0	3.81	21.02	81.7	0.81	16.70	4.95	0.33
4.0	3.81	21.02	81.7	0.81	16.70	4.95	0.44
5.0	3.77	21.11	81.7	0.81	16.77	4.92	0.55
6.0	3.42	21.74	82.1	0.79	17.29	4.60	0.66
7.0	3.40	21.79	83.3	0.73	17.33	4.59	0.76
8.0	2.69	22.53	83.1	0.74	17.96	3.92	0.86
9.0	0.80	25.43	74.2	1.19	20.36	2.19	0.95
10.0	0.15	27.30	80.6	0.86	21.89	1.65	1.02
12.0	-0.82	29.68	86.6	0.58	23.84	0.81	1.11
14.0	-0.95	30.05	87.5	0.54	24.14	0.70	1.19
16.0	-1.07	30.71	87.4	0.54	24.68	0.62	1.26
18.0	-1.16	30.93	87.4	0.54	24.86	0.54	1.32
20.0	-1.14	31.08	87.7	0.53	24.98	0.57	1.38
22.0	-1.36	31.38	87.7	0.53	25.23	0.38	1.44
24.0	-1.32	31.44	88.1	0.51	25.28	0.42	1.50
26.0	-1.35	31.49	88.2	0.50	25.32	0.39	1.55
28.0	-1.40	31.53	88.3	0.50	25.35	0.34	1.60
30.0	-1.45	31.57	88.5	0.49	25.39	0.30	1.66
35.0	-1.50	31.64	88.7	0.48	25.45	0.26	1.78
40.0	-1.54	31.84	88.0	0.51	25.61	0.24	1.91
45.0	-1.52	32.03	87.7	0.52	25.76	0.27	2.02
50.0	-1.46	32.21	88.6	0.48	25.91	0.34	2.13
55.0	-1.45	32.33	88.5	0.49	26.00	0.36	2.23
60.0	-1.48	32.38	86.9	0.56	26.04	0.34	2.33
65.0	-1.47	32.42	88.0	0.51	26.08	0.35	2.43
67.0	-1.47	32.44	87.7	0.52	26.09	0.35	2.47


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION 15 CAST # 5912 DATE : 11:32 ON 12/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 54.60 N LONG : 134 24.80 W

STATION	LAT	LONG	DATE
16	70 59.6 N	134 31.2 W	12:55 GMT ON 12/09/ 86

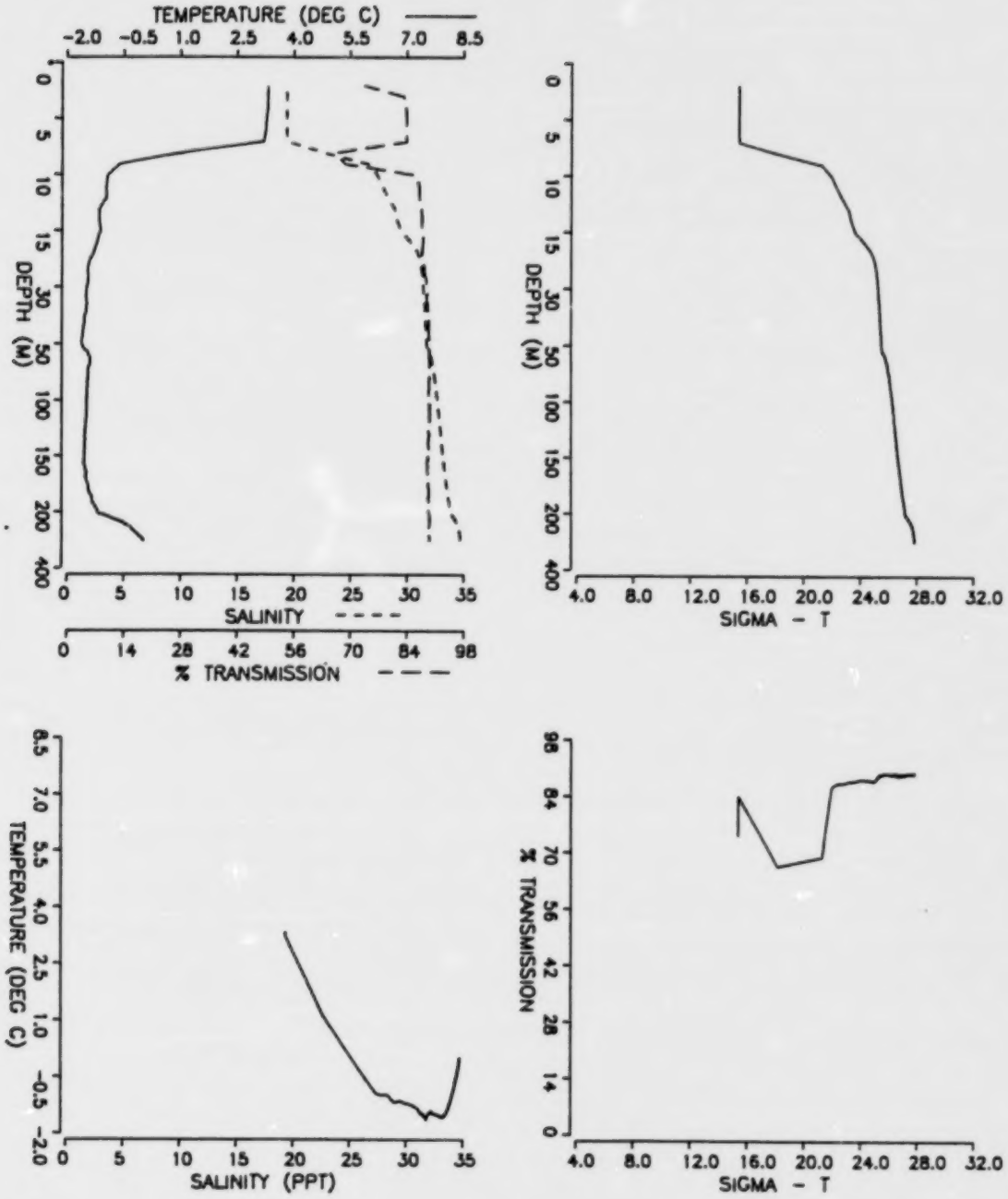
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	4.17	20.16	79.4	0.92	15.99	5.27	0.35
4.0	4.18	19.99	79.5	0.92	15.86	5.27	0.47
5.0	4.14	20.06	79.5	0.92	15.92	5.23	0.59
6.0	4.12	20.10	79.6	0.91	15.94	5.22	0.71
7.0	4.15	20.05	79.6	0.91	15.91	5.24	0.82
8.0	4.07	20.10	79.6	0.91	15.95	5.16	0.94
9.0	3.07	22.04	74.7	1.17	17.55	4.28	1.05
10.0	1.38	24.99	62.3	1.89	19.99	2.74	1.14
12.0	-0.21	28.03	84.2	0.69	22.49	1.33	1.27
14.0	-0.92	29.75	86.2	0.59	23.90	0.72	1.37
16.0	-1.12	30.40	88.0	0.51	24.43	0.55	1.44
18.0	-1.26	30.73	88.2	0.50	24.70	0.43	1.51
20.0	-1.35	30.99	88.2	0.50	24.91	0.36	1.57
22.0	-1.43	31.26	88.6	0.49	25.14	0.30	1.63
24.0	-1.45	31.39	88.9	0.47	25.24	0.28	1.69
26.0	-1.49	31.47	89.1	0.46	25.30	0.25	1.74
28.0	-1.48	31.50	89.2	0.46	25.33	0.27	1.79
30.0	-1.49	31.55	89.3	0.45	25.37	0.26	1.85
35.0	-1.53	31.63	89.5	0.44	25.43	0.22	1.98
40.0	-1.56	31.67	89.6	0.44	25.47	0.20	2.10
45.0	-1.59	31.74	89.8	0.43	25.53	0.18	2.23
50.0	-1.54	31.87	89.8	0.43	25.63	0.24	2.35
55.0	-1.46	32.05	89.9	0.43	25.77	0.34	2.46
60.0	-1.47	32.24	89.4	0.45	25.93	0.34	2.57
65.0	-1.48	32.34	87.5	0.53	26.01	0.33	2.67
70.0	-1.49	32.40	85.3	0.64	26.06	0.33	2.77
75.0	-1.49	32.46	85.8	0.61	26.11	0.34	2.87
80.0	-1.50	32.51	85.3	0.64	26.15	0.34	2.96
85.0	-1.50	32.60	86.5	0.58	26.22	0.35	3.06
90.0	-1.49	32.64	88.6	0.49	26.26	0.36	3.14
95.0	-1.49	32.73	89.3	0.45	26.33	0.37	3.23
100.0	-1.52	32.79	88.7	0.48	26.38	0.35	3.32
110.0	-1.52	32.85	87.2	0.55	26.43	0.36	3.48
120.0	-1.52	32.87	87.4	0.54	26.44	0.37	3.64
130.0	-1.53	32.92	87.7	0.52	26.48	0.37	3.79
140.0	-1.53	33.02	88.2	0.50	26.56	0.38	3.94
150.0	-1.53	33.04	88.3	0.50	26.58	0.39	4.09
175.0	-1.51	33.36	89.2	0.46	26.84	0.44	4.42
200.0	-1.19	33.79	89.3	0.45	27.18	0.81	4.69
225.0	-0.67	34.26	89.1	0.46	27.54	1.37	4.87
250.0	-0.12	34.62	89.4	0.45	27.81	1.96	4.97


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION 16 CAST # 5913 DATE : 12:55 ON 12/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 59.60 N LONG : 134 31.20 W

STATION	LAT	LONG	DATE
17	71 4.6 N	134 38.0 W	03:34 GMT ON 13/09/ 86

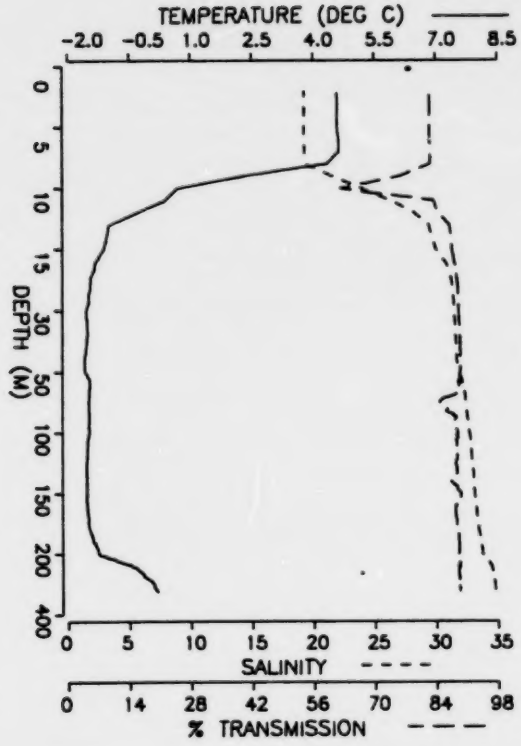
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	3.33	19.43	73.6	1.23	15.46	4.38	0.24
3.0	3.32	19.43	83.2	0.73	15.46	4.38	0.37
4.0	3.32	19.43	83.8	0.71	15.46	4.37	0.49
5.0	3.29	19.43	83.9	0.70	15.47	4.35	0.61
6.0	3.27	19.43	83.9	0.70	15.47	4.32	0.73
7.0	3.21	19.45	84.0	0.70	15.49	4.27	0.86
8.0	1.11	22.76	66.5	1.63	18.22	2.35	0.97
9.0	-0.61	26.61	68.8	1.49	21.35	0.85	1.05
10.0	-0.93	27.45	86.3	0.59	22.04	0.57	1.11
12.0	-0.96	28.39	87.1	0.55	22.79	0.60	1.22
14.0	-1.15	29.16	87.7	0.52	23.42	0.45	1.31
16.0	-1.16	29.85	88.1	0.51	23.98	0.48	1.40
18.0	-1.21	30.40	88.0	0.51	24.43	0.46	1.47
20.0	-1.28	30.85	87.9	0.52	24.80	0.42	1.54
22.0	-1.35	31.12	87.7	0.52	25.02	0.37	1.60
24.0	-1.43	31.27	88.2	0.50	25.14	0.29	1.66
26.0	-1.46	31.35	88.4	0.49	25.21	0.28	1.71
28.0	-1.45	31.43	88.8	0.48	25.27	0.29	1.77
30.0	-1.48	31.47	89.0	0.46	25.31	0.27	1.82
35.0	-1.48	31.55	89.1	0.46	25.37	0.28	1.95
40.0	-1.54	31.62	89.3	0.45	25.43	0.22	2.08
45.0	-1.57	31.70	89.5	0.44	25.49	0.20	2.21
50.0	-1.59	31.76	89.6	0.44	25.54	0.18	2.33
55.0	-1.53	31.85	89.6	0.44	25.62	0.25	2.45
60.0	-1.43	32.08	89.6	0.44	25.80	0.37	2.57
65.0	-1.39	32.22	89.7	0.44	25.91	0.42	2.67
70.0	-1.43	32.30	89.6	0.44	25.98	0.39	2.78
75.0	-1.45	32.39	89.6	0.44	26.05	0.38	2.88
80.0	-1.45	32.47	89.6	0.44	26.11	0.39	2.97
85.0	-1.46	32.53	89.5	0.44	26.16	0.38	3.07
90.0	-1.47	32.59	89.5	0.44	26.22	0.38	3.16
95.0	-1.47	32.65	89.5	0.44	26.26	0.39	3.25
100.0	-1.48	32.71	89.5	0.44	26.31	0.39	3.34
110.0	-1.48	32.80	89.7	0.44	26.38	0.39	3.50
120.0	-1.51	32.90	89.7	0.44	26.47	0.38	3.66
130.0	-1.52	33.00	89.7	0.44	26.55	0.38	3.82
140.0	-1.53	33.10	89.3	0.45	26.63	0.39	3.96
150.0	-1.54	33.20	89.3	0.45	26.71	0.39	4.10
175.0	-1.45	33.50	89.3	0.45	26.95	0.52	4.40
200.0	-1.18	33.85	89.3	0.45	27.22	0.82	4.64
225.0	-0.76	34.25	89.7	0.44	27.54	1.28	4.81
250.0	-0.38	34.53	89.6	0.44	27.74	1.69	4.92
300.0	0.03	34.71	89.7	0.44	27.87	2.15	5.06

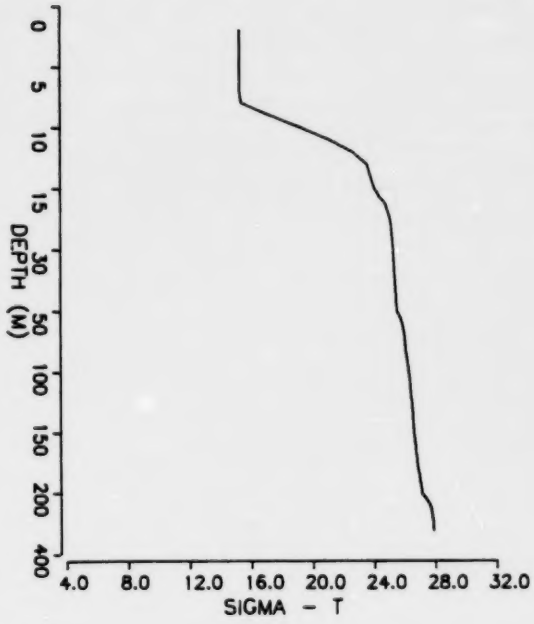

TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

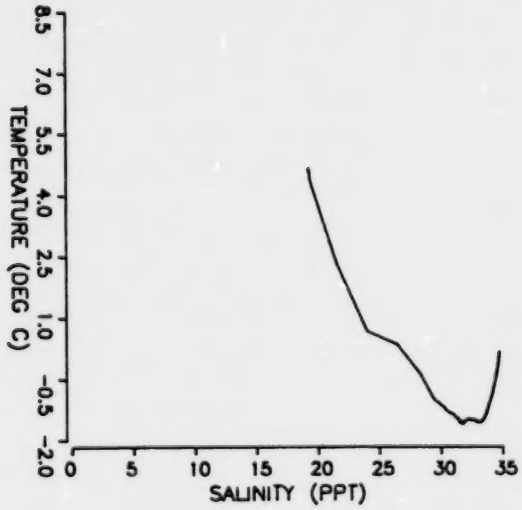
STATION 17 CAST # 5914 DATE : 03:34 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 71 4.60 N LONG : 134 38.00 W

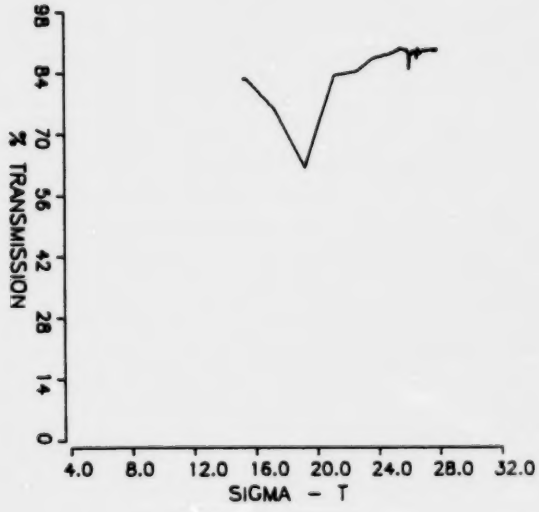
STATION	LAT	LONG	DATE
18	70 37.4 N	136 43.0 W	05:19 GMT ON 13/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.60	19.35	82.6	0.76	15.32	5.65	0.25
3.0	4.61	19.35	82.7	0.76	15.32	5.66	0.37
4.0	4.60	19.35	82.7	0.76	15.32	5.65	0.49
5.0	4.61	19.35	82.6	0.76	15.32	5.66	0.62
6.0	4.64	19.34	82.7	0.76	15.32	5.70	0.74
7.0	4.65	19.36	82.8	0.75	15.33	5.70	0.87
8.0	4.36	19.48	82.8	0.75	15.44	5.42	0.99
9.0	2.31	21.65	75.8	1.11	17.28	3.49	1.10
10.0	0.69	24.07	62.4	1.89	19.28	2.01	1.20
12.0	-0.33	28.28	84.5	0.68	22.70	1.22	1.33
14.0	-1.05	29.71	87.6	0.53	23.87	0.59	1.42
16.0	-1.19	30.27	87.8	0.52	24.32	0.48	1.50
18.0	-1.32	30.75	88.2	0.50	24.72	0.37	1.57
20.0	-1.35	31.01	88.7	0.48	24.93	0.36	1.63
22.0	-1.45	31.24	88.8	0.48	25.12	0.28	1.69
24.0	-1.45	31.34	89.1	0.46	25.20	0.28	1.75
26.0	-1.49	31.41	89.1	0.46	25.25	0.25	1.80
28.0	-1.49	31.45	89.2	0.46	25.29	0.25	1.86
30.0	-1.56	31.50	89.2	0.46	25.33	0.19	1.91
35.0	-1.53	31.57	89.4	0.45	25.39	0.23	2.04
40.0	-1.54	31.64	89.5	0.44	25.44	0.22	2.17
45.0	-1.59	31.72	89.7	0.44	25.51	0.18	2.30
50.0	-1.58	31.79	89.6	0.44	25.57	0.19	2.42
55.0	-1.48	32.06	89.3	0.45	25.79	0.31	2.53
60.0	-1.47	32.23	89.4	0.45	25.92	0.34	2.64
65.0	-1.48	32.31	88.7	0.48	25.99	0.34	2.75
70.0	-1.48	32.38	87.7	0.53	26.04	0.34	2.85
75.0	-1.49	32.42	84.9	0.66	26.07	0.34	2.94
80.0	-1.49	32.46	86.5	0.58	26.11	0.35	3.04
85.0	-1.48	32.53	88.0	0.51	26.17	0.36	3.13
90.0	-1.48	32.60	88.3	0.50	26.22	0.37	3.22
95.0	-1.49	32.65	88.5	0.49	26.26	0.37	3.31
100.0	-1.48	32.71	89.0	0.47	26.31	0.38	3.40
110.0	-1.52	32.81	88.7	0.48	26.40	0.36	3.57
120.0	-1.53	32.90	88.9	0.47	26.46	0.36	3.73
130.0	-1.55	33.00	88.8	0.48	26.55	0.36	3.88
140.0	-1.54	33.06	87.5	0.53	26.59	0.37	4.02
150.0	-1.54	33.12	89.7	0.44	26.65	0.39	4.16
175.0	-1.50	33.38	88.8	0.48	26.86	0.46	4.48
200.0	-1.25	33.76	89.1	0.46	27.15	0.75	4.74
225.0	-0.74	34.23	89.2	0.46	27.52	1.31	4.92
250.0	-0.31	34.53	89.1	0.46	27.74	1.77	5.03
300.0	0.10	34.73	89.3	0.45	27.88	2.22	5.16
322.0	0.18	34.76	89.4	0.45	27.90	2.32	5.21





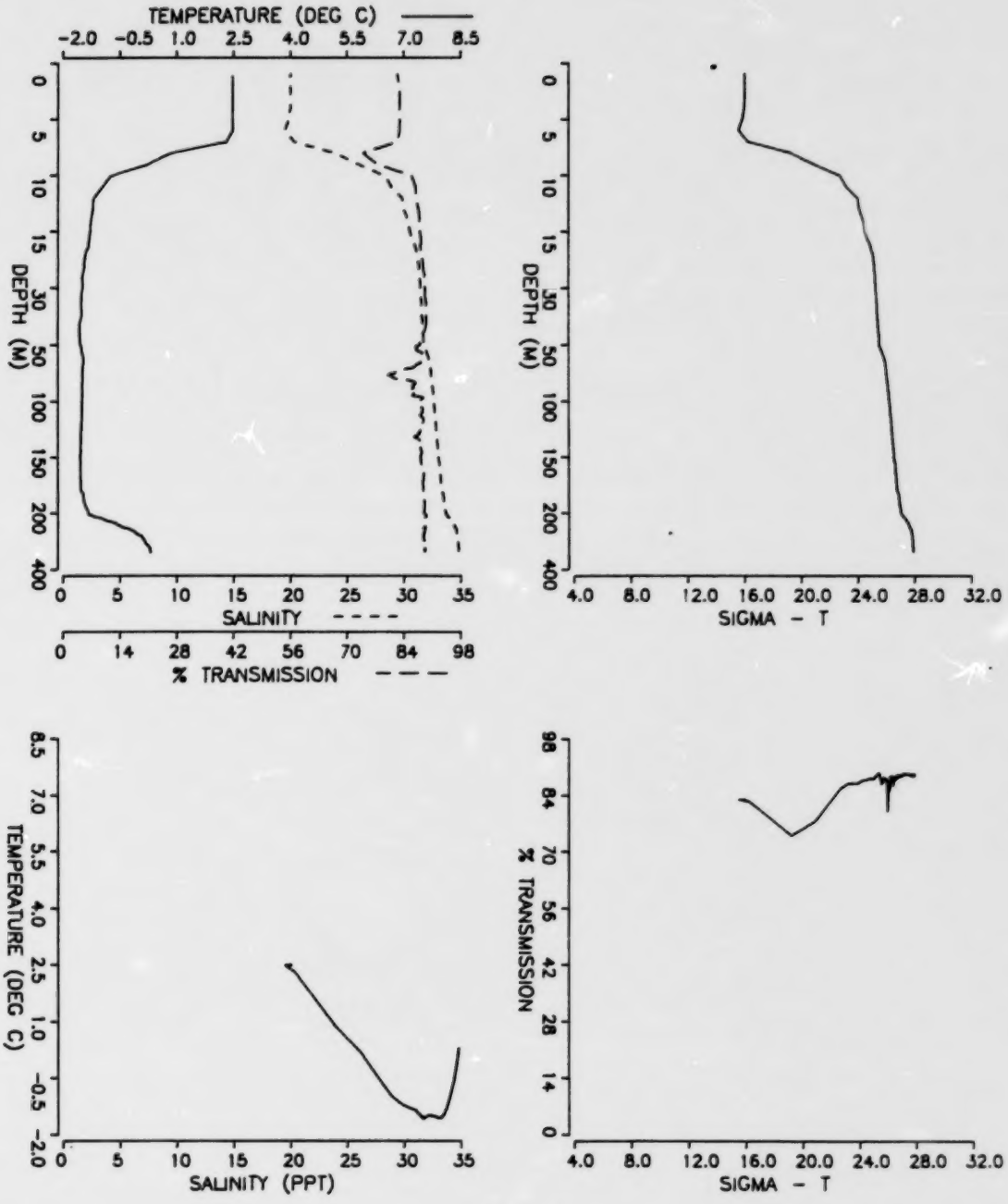




STATION 18 CAST # 5915 DATE : 05:19 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 37.40 N LONG : 136 43.00 W

STATION	LAT	LONG	DATE
19	70 32.2 N	136 36.8 W	07:17 GMT ON 13/09/ 86

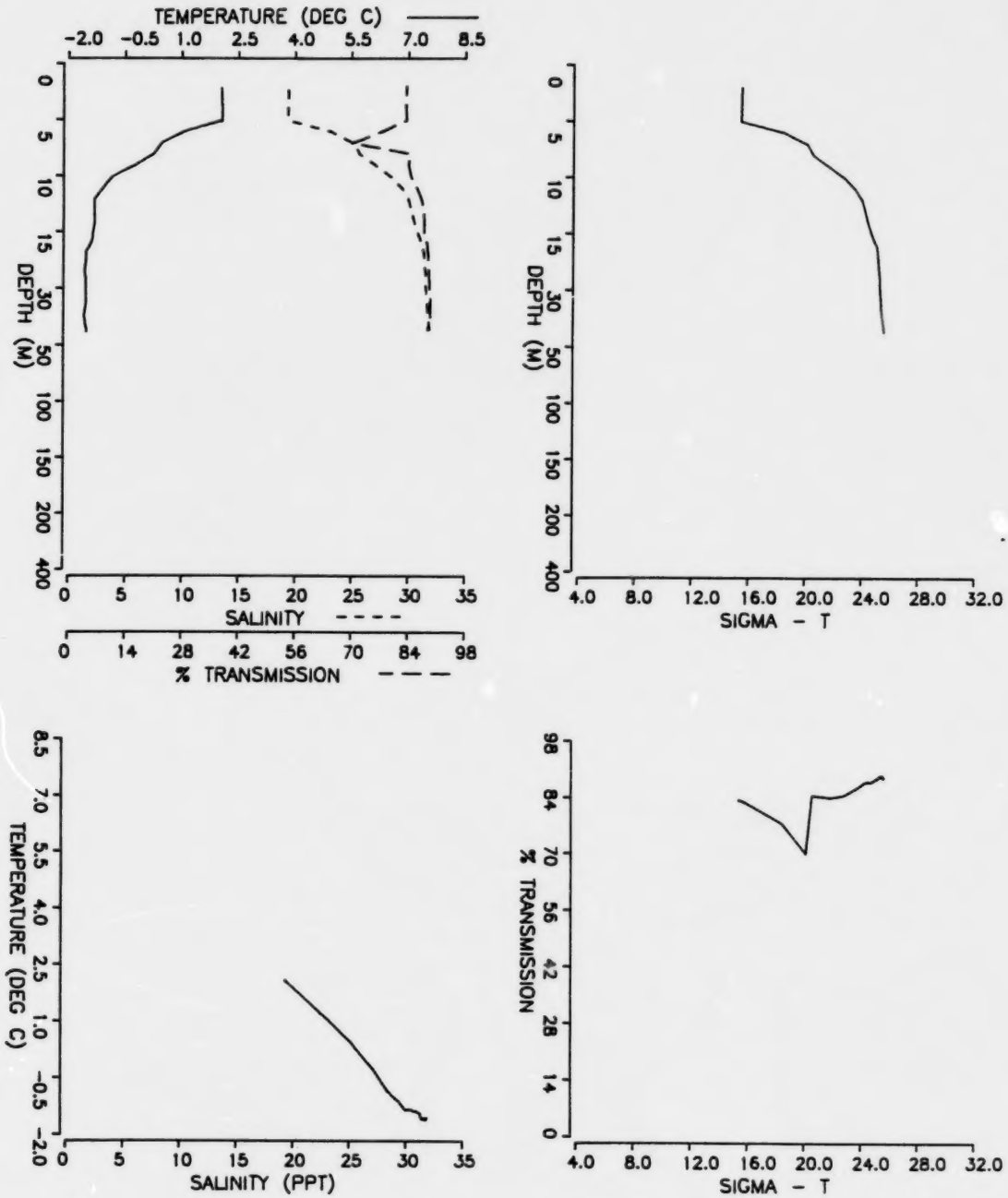
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	2.49	20.07	82.4	0.78	16.01	3.58	0.12
2.0	2.49	20.07	83.1	0.74	16.01	3.58	0.23
3.0	2.49	20.07	83.1	0.74	16.01	3.58	0.35
4.0	2.50	20.07	83.0	0.74	16.01	3.59	0.47
5.0	2.49	19.92	83.1	0.74	15.89	3.58	0.59
6.0	2.50	19.58	83.0	0.74	15.62	3.56	0.70
7.0	2.33	20.39	82.6	0.77	16.27	3.44	0.82
8.0	0.87	24.07	74.1	1.20	19.27	2.18	0.92
9.0	0.22	26.15	77.7	1.01	20.96	1.65	1.00
10.0	-0.74	28.37	85.9	0.61	22.78	0.81	1.06
12.0	-1.20	29.91	87.1	0.55	24.03	0.44	1.15
14.0	-1.27	30.40	87.9	0.51	24.44	0.40	1.23
16.0	-1.30	30.67	88.1	0.51	24.65	0.39	1.29
18.0	-1.33	30.95	88.3	0.50	24.88	0.37	1.36
20.0	-1.39	31.12	88.2	0.50	25.02	0.33	1.42
22.0	-1.43	31.27	88.5	0.49	25.14	0.29	1.48
24.0	-1.45	31.33	88.7	0.48	25.19	0.28	1.53
26.0	-1.48	31.41	89.1	0.46	25.26	0.26	1.59
28.0	-1.49	31.44	89.1	0.46	25.28	0.25	1.64
30.0	-1.49	31.46	89.2	0.46	25.30	0.25	1.70
35.0	-1.52	31.54	89.5	0.45	25.37	0.23	1.83
40.0	-1.53	31.60	89.5	0.44	25.41	0.23	1.96
45.0	-1.57	31.70	89.2	0.46	25.50	0.20	2.09
50.0	-1.54	31.77	88.0	0.51	25.55	0.24	2.21
55.0	-1.51	31.96	87.3	0.54	25.70	0.28	2.33
60.0	-1.47	32.13	88.3	0.50	25.84	0.33	2.44
65.0	-1.47	32.28	88.2	0.50	25.96	0.34	2.54
70.0	-1.48	32.33	86.5	0.58	26.00	0.34	2.65
75.0	-1.49	32.38	81.7	0.81	26.05	0.34	2.75
80.0	-1.49	32.43	81.8	0.80	26.09	0.35	2.84
85.0	-1.49	32.49	86.7	0.57	26.14	0.35	2.94
90.0	-1.50	32.54	85.2	0.64	26.18	0.35	3.03
95.0	-1.49	32.59	86.0	0.60	26.21	0.36	3.12
100.0	-1.50	32.63	88.3	0.50	26.24	0.36	3.21
110.0	-1.51	32.73	88.5	0.49	26.33	0.37	3.38
120.0	-1.51	32.81	88.8	0.47	26.40	0.37	3.55
130.0	-1.53	32.88	87.6	0.53	26.45	0.37	3.71
140.0	-1.54	32.97	88.5	0.49	26.53	0.37	3.86
150.0	-1.55	33.04	88.1	0.51	26.59	0.38	4.01
175.0	-1.53	33.28	88.7	0.48	26.78	0.43	4.35
200.0	-1.32	33.67	89.0	0.46	27.08	0.67	4.62
225.0	-0.85	34.14	89.3	0.45	27.45	1.19	4.82
250.0	-0.34	34.50	89.0	0.47	27.72	1.73	4.94
300.0	0.16	34.75	89.0	0.46	27.90	2.29	5.06
336.0	0.31	34.81	89.2	0.46	27.94	2.46	5.13



STATION 19 CAST # 5916 DATE : 07:17 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 32.20 N LONG : 136 36.80 W

STATION	LAT	LONG	DATE
20	70 27.0 N	136 30.8 W	08:36 GMT ON 13/09/ 86

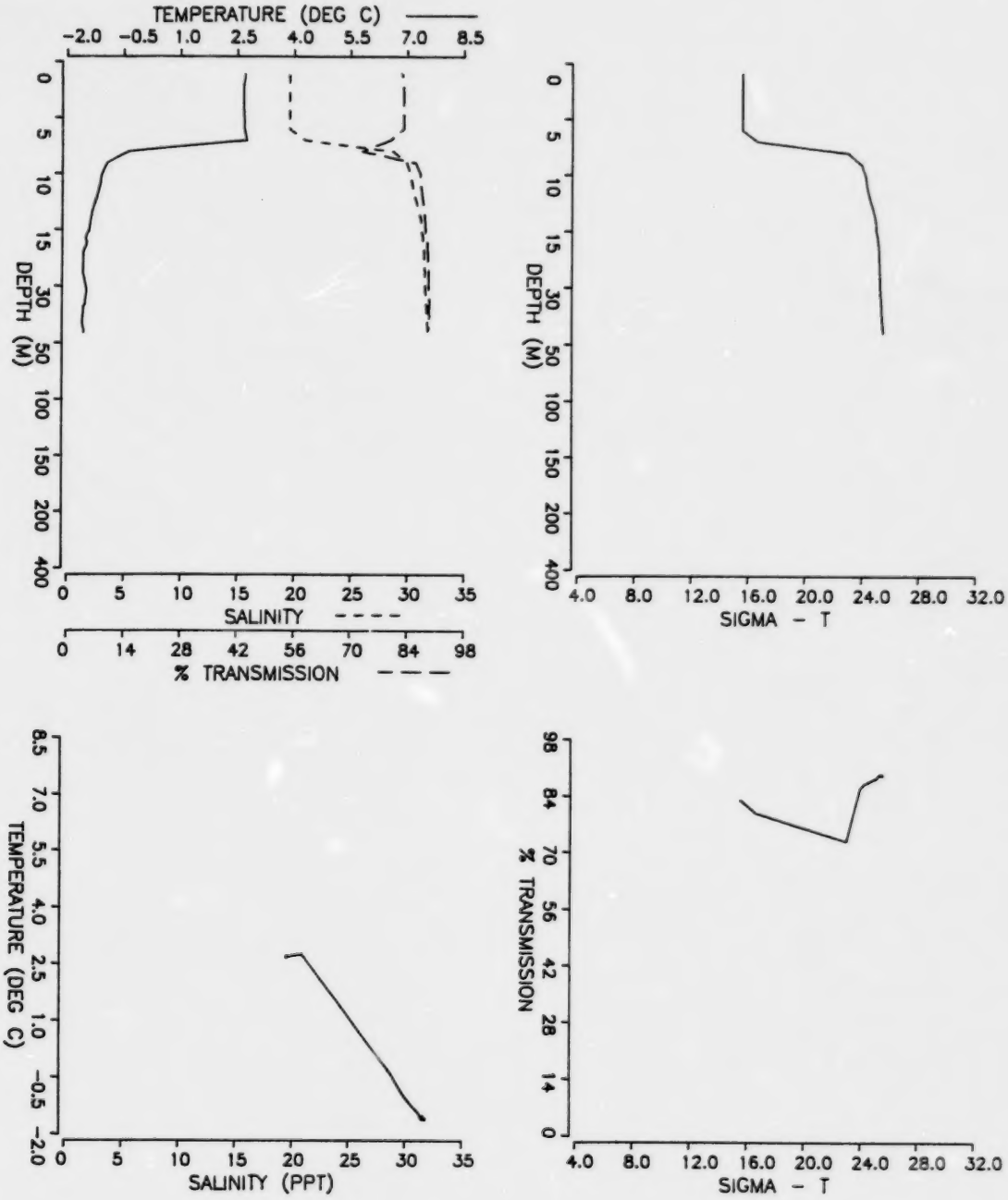
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	2.06	19.46	83.5	0.72	15.54	3.12	0.24
3.0	2.07	19.45	83.4	0.73	15.54	3.12	0.36
4.0	2.08	19.41	83.4	0.73	15.50	3.14	0.49
5.0	2.08	19.39	83.6	0.72	15.48	3.14	0.61
6.0	1.06	23.15	77.6	1.02	18.53	2.32	0.72
7.0	0.47	25.19	70.1	1.42	20.18	1.85	0.80
8.0	0.26	25.73	84.5	0.67	20.63	1.67	0.87
9.0	-0.24	27.16	84.0	0.70	21.79	1.24	0.94
10.0	-0.85	28.47	84.7	0.67	22.86	0.71	1.00
12.0	-1.32	30.00	87.2	0.55	24.11	0.32	1.08
14.0	-1.31	30.50	87.9	0.51	24.52	0.36	1.16
16.0	-1.36	30.95	88.1	0.51	24.88	0.34	1.22
18.0	-1.42	31.28	88.7	0.48	25.15	0.30	1.28
20.0	-1.54	31.34	88.8	0.47	25.20	0.19	1.34
22.0	-1.54	31.40	88.9	0.47	25.25	0.19	1.39
24.0	-1.56	31.46	89.0	0.47	25.30	0.17	1.45
26.0	-1.56	31.51	89.1	0.46	25.34	0.18	1.50
28.0	-1.55	31.53	89.3	0.45	25.36	0.20	1.55
30.0	-1.54	31.55	89.3	0.45	25.37	0.20	1.60
35.0	-1.55	31.64	89.5	0.44	25.45	0.21	1.73
40.0	-1.58	31.77	89.5	0.44	25.55	0.18	1.86
45.0	-1.52	31.92	88.9	0.47	25.67	0.26	1.98



STATION 20 CAST # 5917 DATE : 08:36 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 27.00 N LONG : 136 30.80 W

STATION	LAT	LONG	DATE
21	70 21.5 N	136 25.5 W	10:04 GMT ON 13/09/ 86

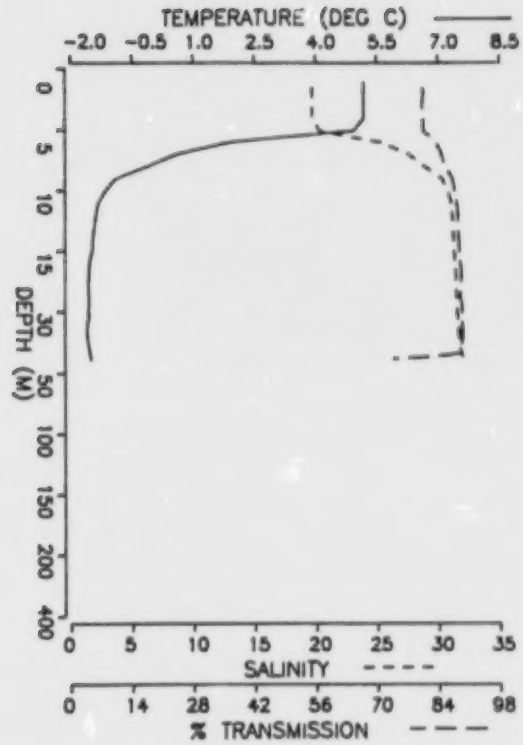
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	2.72	19.62	82.6	0.76	15.64	3.79	0.12
2.0	2.67	19.62	83.0	0.75	15.65	3.74	0.24
3.0	2.67	19.62	83.0	0.74	15.64	3.74	0.36
4.0	2.67	19.62	83.1	0.74	15.65	3.74	0.48
5.0	2.69	19.62	83.0	0.74	15.65	3.75	0.60
6.0	2.69	19.63	83.1	0.74	15.65	3.76	0.72
7.0	2.75	20.95	79.8	0.90	16.70	3.89	0.84
8.0	-0.38	28.75	72.8	1.27	23.08	1.20	0.92
9.0	-0.97	29.94	86.0	0.60	24.05	0.67	0.96
10.0	-1.10	30.29	87.2	0.55	24.34	0.56	1.00
12.0	-1.23	30.65	87.7	0.53	24.63	0.45	1.07
14.0	-1.39	31.18	88.3	0.50	25.06	0.32	1.13
16.0	-1.49	31.30	88.5	0.49	25.17	0.23	1.19
18.0	-1.49	31.39	88.8	0.47	25.24	0.24	1.24
20.0	-1.56	31.44	89.0	0.47	25.28	0.18	1.30
22.0	-1.58	31.47	89.1	0.46	25.31	0.15	1.35
24.0	-1.59	31.50	89.2	0.46	25.34	0.15	1.41
26.0	-1.59	31.53	89.3	0.45	25.35	0.16	1.46
28.0	-1.55	31.55	89.3	0.45	25.37	0.20	1.51
30.0	-1.50	31.57	89.3	0.45	25.39	0.25	1.56
35.0	-1.53	31.66	89.5	0.44	25.46	0.23	1.69
40.0	-1.59	31.72	89.5	0.44	25.51	0.17	1.82
45.0	-1.57	31.83	89.1	0.46	25.60	0.21	1.94
46.0	-1.56	31.85	89.2	0.46	25.61	0.22	1.96

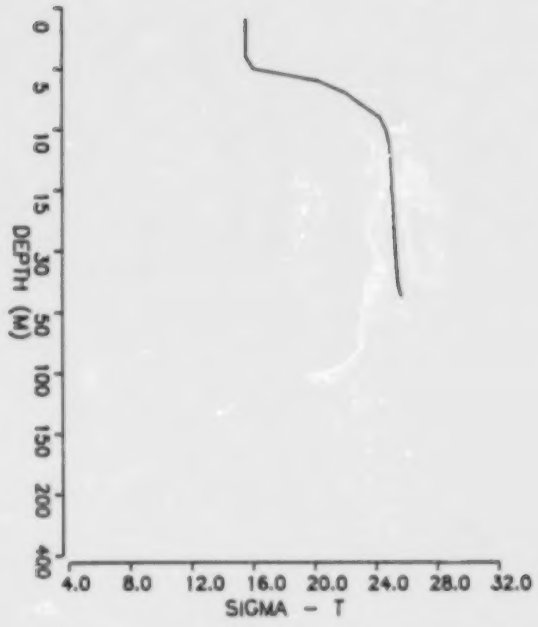

TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

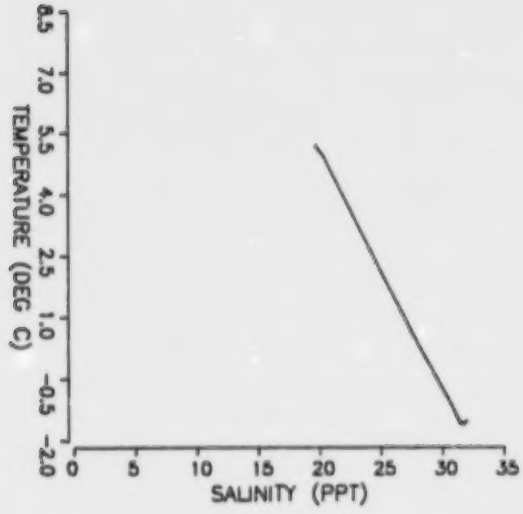
STATION 21 CAST # 5918 DATE : 10:04 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 21.50 N LONG : 136 25.50 W

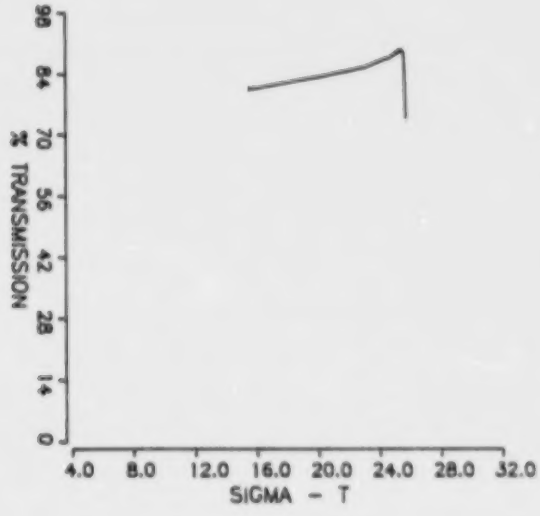
STATION	LAT	LONG	DATE
22	70 16.4 N	136 19.2 W	11:45 GMT ON 13/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.20	19.78	80.7	0.86	15.62	6.27	0.12
2.0	5.20	19.78	80.7	0.86	15.62	6.27	0.24
3.0	5.20	19.78	80.5	0.87	15.62	6.27	0.36
4.0	5.19	19.78	80.7	0.86	15.62	6.27	0.48
5.0	4.95	20.40	80.8	0.86	16.13	6.06	0.60
6.0	1.91	25.42	83.6	0.72	20.31	3.30	0.70
7.0	0.62	27.63	84.8	0.66	22.14	2.13	0.76
8.0	-0.11	28.92	85.7	0.62	23.20	1.47	0.82
9.0	-0.90	30.36	87.4	0.54	24.39	0.77	0.86
10.0	-1.17	30.84	87.9	0.52	24.79	0.52	0.89
12.0	-1.39	31.18	88.6	0.49	25.06	0.32	0.95
14.0	-1.46	31.30	88.8	0.48	25.17	0.26	1.01
16.0	-1.51	31.36	89.0	0.47	25.22	0.21	1.06
18.0	-1.55	31.41	89.1	0.46	25.26	0.18	1.12
20.0	-1.56	31.44	89.3	0.45	25.28	0.18	1.17
22.0	-1.57	31.46	89.3	0.45	25.30	0.17	1.23
24.0	-1.56	31.49	89.3	0.45	25.32	0.18	1.28
26.0	-1.56	31.52	89.0	0.46	25.35	0.18	1.33
28.0	-1.56	31.55	89.5	0.45	25.37	0.19	1.39
30.0	-1.57	31.58	89.6	0.44	25.40	0.18	1.44
35.0	-1.59	31.68	89.6	0.44	25.48	0.16	1.57
40.0	-1.58	31.79	89.5	0.44	25.57	0.19	1.69
45.0	-1.50	32.08	73.6	1.23	25.80	0.28	1.81





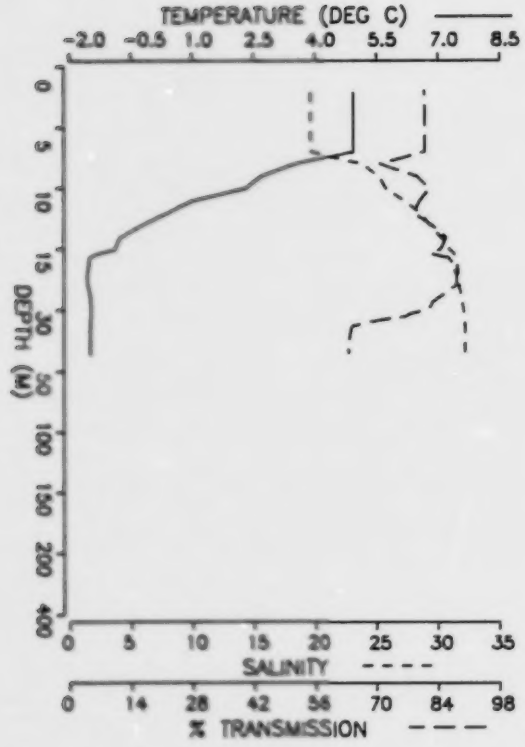


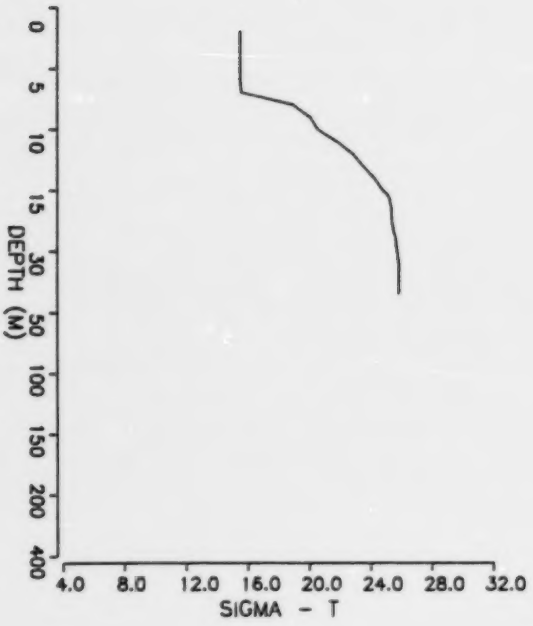


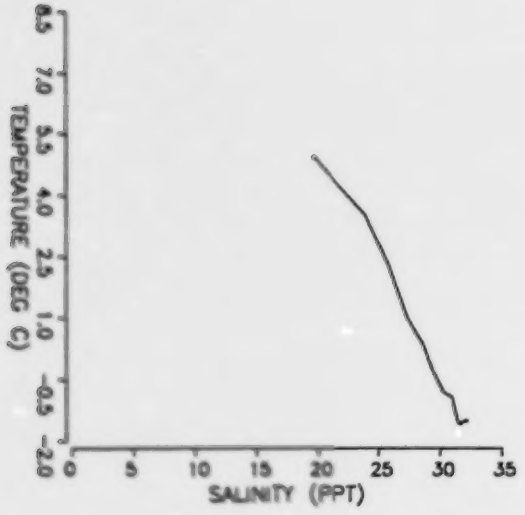
STATION 22 CAST # 5919 DATE : 11:45 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 16.40 N LONG : 136 19.20 W

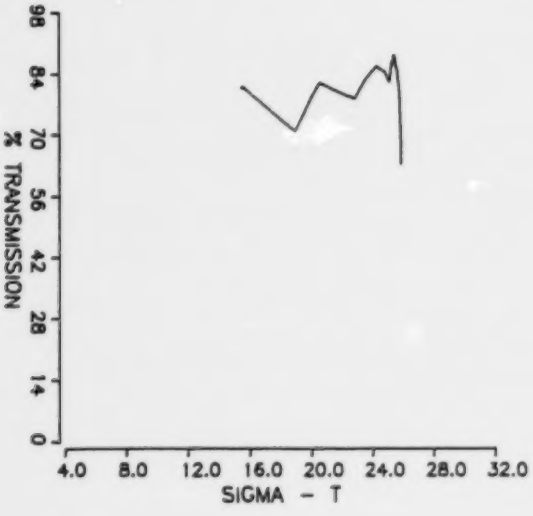
STATION	LAT	LONG	DATE
23	70 11.2 N	136 13.6 W	13:59 GMT ON 13/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.94	19.70	80.9	0.85	15.58	6.01	0.24
3.0	4.94	19.71	81.1	0.84	15.58	6.01	0.36
4.0	4.94	19.71	81.1	0.84	15.58	6.01	0.48
5.0	4.94	19.71	81.1	0.84	15.58	6.01	0.61
6.0	4.94	19.71	81.1	0.84	15.58	6.01	0.73
7.0	4.94	19.78	81.1	0.84	15.64	6.02	0.85
8.0	3.55	23.92	70.9	1.37	19.02	4.85	0.95
9.0	2.70	25.26	79.2	0.93	20.14	4.08	1.03
10.0	2.33	25.84	82.1	0.79	20.63	3.74	1.11
12.0	0.41	28.61	78.5	0.97	22.94	1.98	1.23
14.0	-0.77	30.30	85.9	0.61	24.34	0.89	1.32
16.0	-1.33	31.33	82.3	0.78	25.19	0.40	1.38
18.0	-1.53	31.55	87.1	0.55	25.37	0.21	1.43
20.0	-1.56	31.64	87.8	0.52	25.45	0.19	1.48
22.0	-1.57	31.67	88.3	0.50	25.47	0.18	1.53
24.0	-1.55	31.75	87.9	0.52	25.53	0.21	1.58
26.0	-1.51	31.92	85.3	0.64	25.67	0.26	1.63
28.0	-1.48	32.01	82.7	0.76	25.75	0.29	1.68
30.0	-1.48	32.10	80.9	0.85	25.82	0.30	1.72
35.0	-1.49	32.23	64.6	1.75	25.92	0.30	1.83
40.0	-1.50	32.24	63.9	1.79	25.93	0.30	1.93
44.0	-1.50	32.20	63.6	1.81	25.90	0.30	2.02





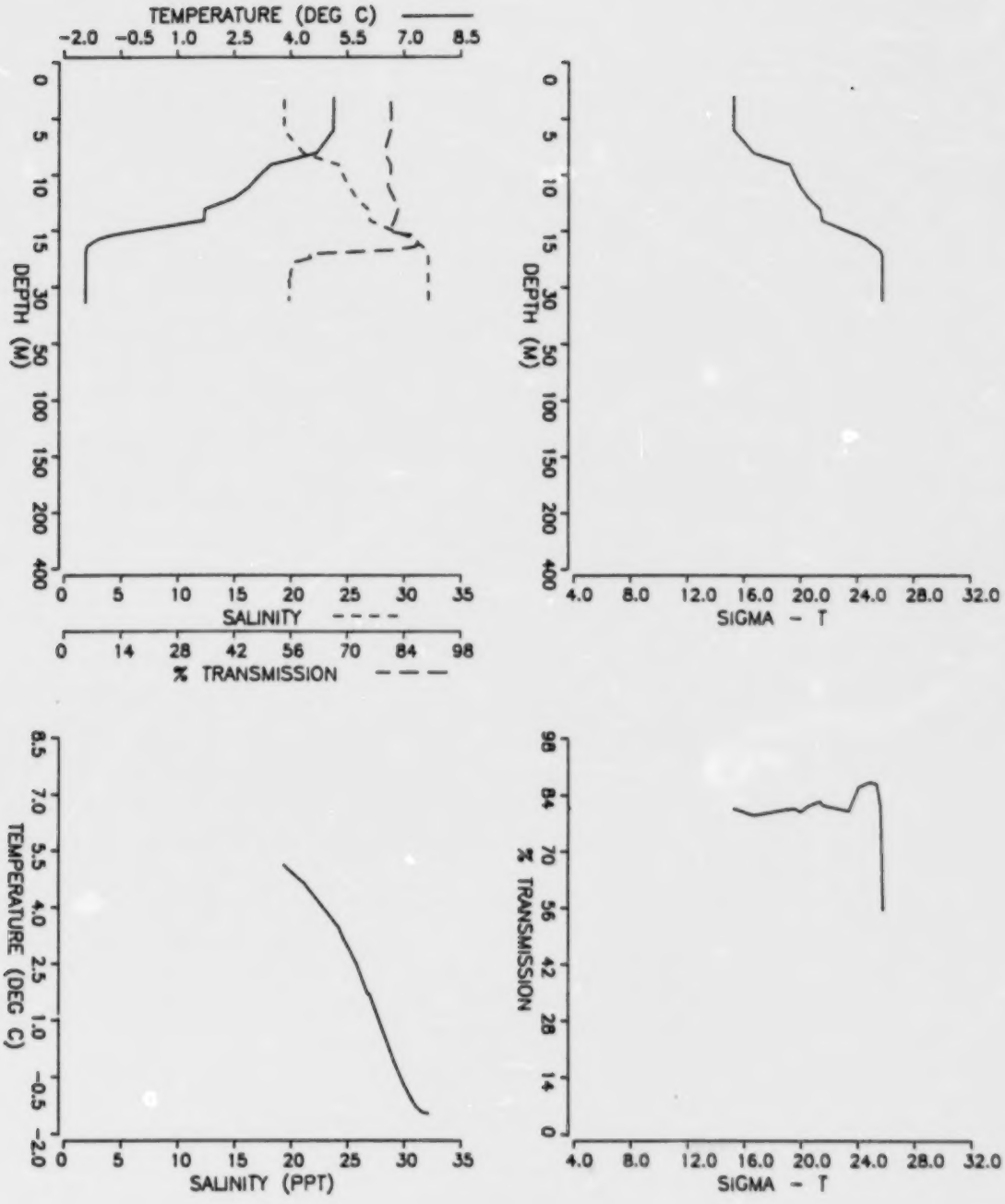




STATION 23 CAST # 5920 DATE : 13:59 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 11.20 N LONG : 136 13.60 W

STATION	LAT	LONG	DATE
24	70 5.8 N	136 8.0 W	14:58 GMT ON 13/09/ 86

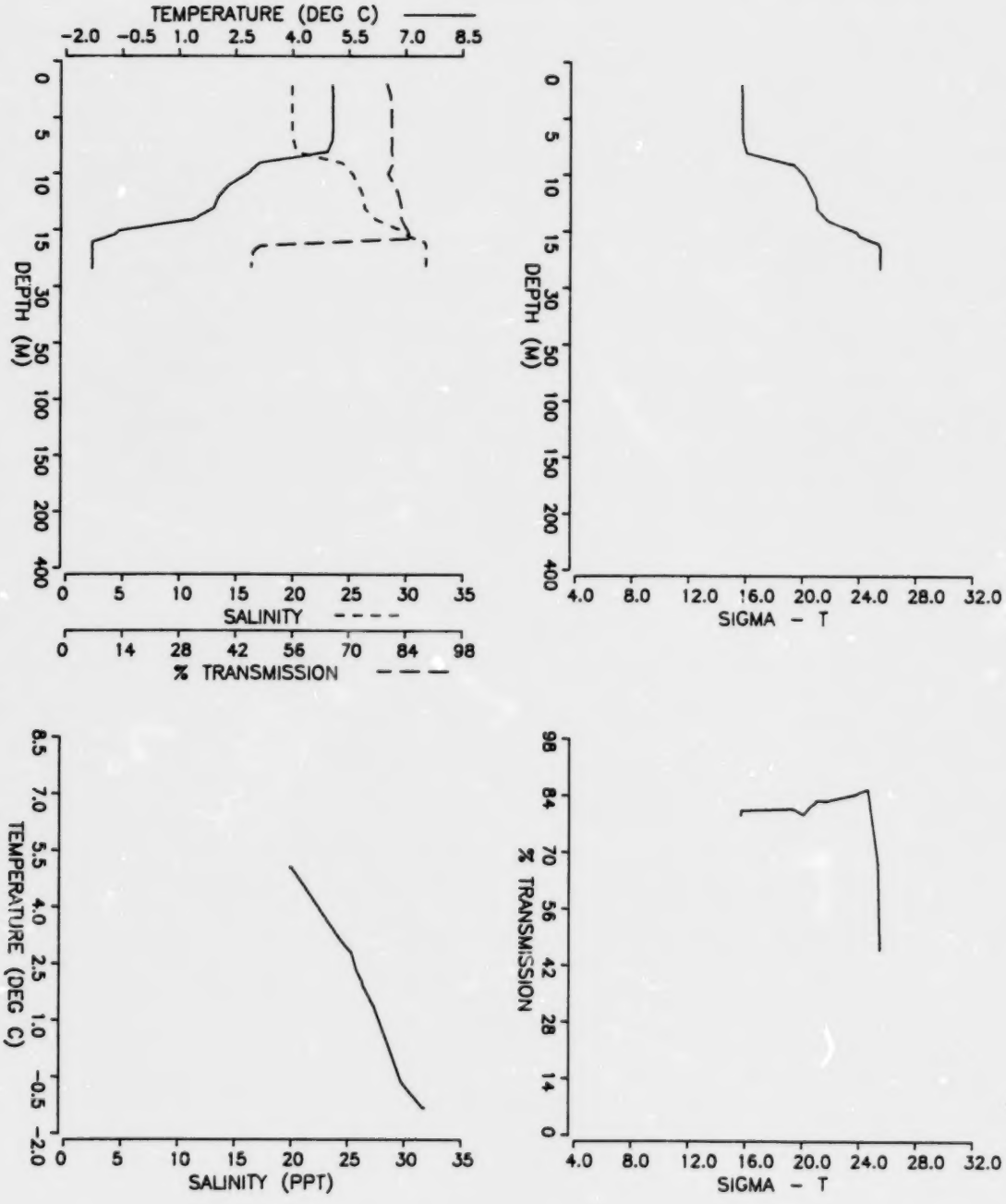
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	5.15	19.48	80.7	0.86	15.38	6.20	0.37
4.0	5.15	19.48	80.7	0.86	15.38	6.21	0.49
5.0	5.15	19.48	80.8	0.85	15.38	6.20	0.62
6.0	5.15	19.48	80.9	0.85	15.38	6.21	0.74
7.0	4.92	20.33	80.0	0.89	16.07	6.03	0.86
8.0	4.70	21.19	79.1	0.94	16.77	5.85	0.97
9.0	3.49	24.29	80.7	0.86	19.32	4.82	1.07
10.0	3.18	24.70	80.7	0.86	19.66	4.53	1.15
12.0	2.52	25.87	81.5	0.82	20.64	3.93	1.31
14.0	1.71	27.03	81.7	0.81	21.61	3.19	1.44
16.0	-0.73	30.10	86.1	0.60	24.17	0.93	1.53
18.0	-1.26	31.13	87.3	0.54	25.03	0.45	1.60
20.0	-1.43	31.97	81.3	0.83	25.71	0.34	1.65
22.0	-1.43	32.11	61.1	1.97	25.83	0.34	1.69
24.0	-1.44	32.14	57.2	2.24	25.85	0.34	1.74
26.0	-1.44	32.14	56.1	2.31	25.85	0.34	1.78
28.0	-1.44	32.15	55.7	2.34	25.85	0.34	1.82
30.0	-1.44	32.15	55.9	2.33	25.85	0.34	1.87
35.0	-1.44	32.15	55.8	2.34	25.85	0.35	1.97



STATION 24 CAST # 5921 DATE : 14:58 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 5.80 N LONG : 136 8.00 W

STATION	LAT	LONG	DATE
25	70 0.2 N	136 2.0 W	18:30 GMT ON 13/09/ 86

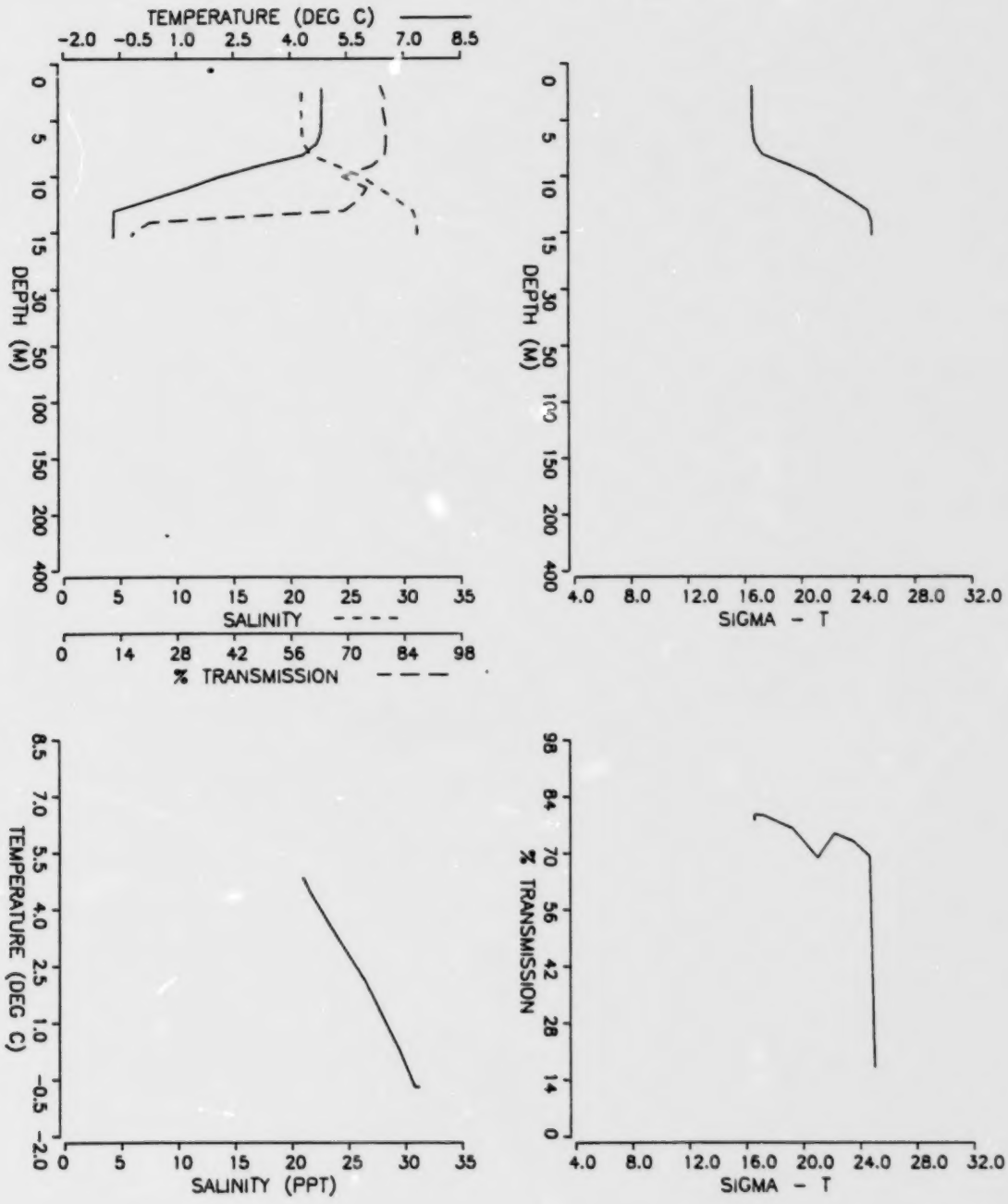
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.07	19.97	79.3	0.93	15.78	6.15	0.24
3.0	5.08	19.98	80.2	0.88	15.79	6.16	0.36
4.0	5.08	20.00	80.4	0.87	15.80	6.16	0.48
5.0	5.08	20.00	80.5	0.87	15.80	6.16	0.60
6.0	5.08	19.99	80.5	0.87	15.80	6.16	0.71
7.0	5.05	20.09	80.5	0.87	15.88	6.15	0.83
8.0	4.94	20.38	80.4	0.87	16.11	6.05	0.95
9.0	3.14	24.43	81.0	0.85	19.45	4.47	1.05
10.0	2.81	25.35	79.5	0.92	20.20	4.20	1.13
12.0	2.04	26.31	82.3	0.78	21.01	3.48	1.27
14.0	1.38	27.38	82.8	0.75	21.91	2.88	1.41
16.0	-0.70	29.98	84.8	0.66	24.08	0.95	1.50
18.0	-1.30	31.64	67.2	1.59	25.44	0.44	1.56
20.0	-1.30	31.79	46.8	3.03	25.56	0.45	1.61
22.0	-1.30	31.78	46.6	3.05	25.56	0.45	1.66
24.0	-1.30	31.79	46.1	3.10	25.56	0.45	1.71
25.0	-1.31	31.79	45.9	3.12	25.56	0.45	1.73



STATION 25 CAST # 5922 DATE : 18:30 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 0.20 N LONG : 136 2.00 W

STATION	LAT	LONG	DATE
26	69 54.8 N	135 55.2 W	19:48 GMT ON 13/09/ 86

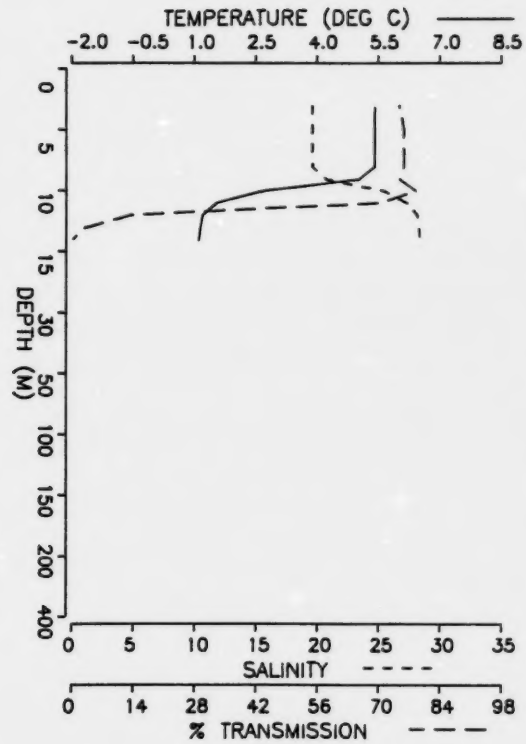
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.86	21.06	78.3	0.98	16.65	6.00	0.22
3.0	4.85	21.06	79.4	0.92	16.65	6.00	0.33
4.0	4.85	21.06	78.9	0.95	16.66	5.99	0.44
5.0	4.85	21.06	79.5	0.92	16.66	6.00	0.55
6.0	4.83	21.10	79.6	0.91	16.69	5.98	0.66
7.0	4.72	21.26	79.7	0.91	16.83	5.88	0.77
8.0	4.36	21.88	79.4	0.92	17.34	5.55	0.88
9.0	3.18	24.25	76.3	1.08	19.30	4.50	0.97
10.0	2.15	26.45	68.9	1.49	21.12	3.60	1.05
12.0	0.34	29.42	73.1	1.26	23.59	1.95	1.16
14.0	-0.67	31.16	21.3	6.19	25.03	1.05	1.23
16.0	-0.67	31.20	16.9	7.10	25.06	1.05	1.29

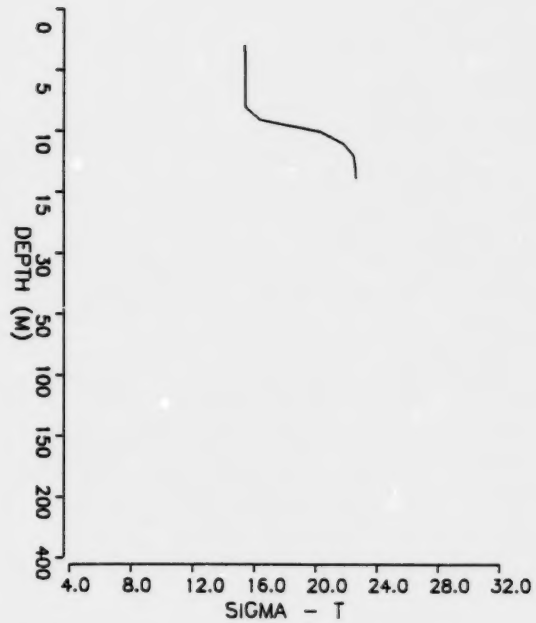


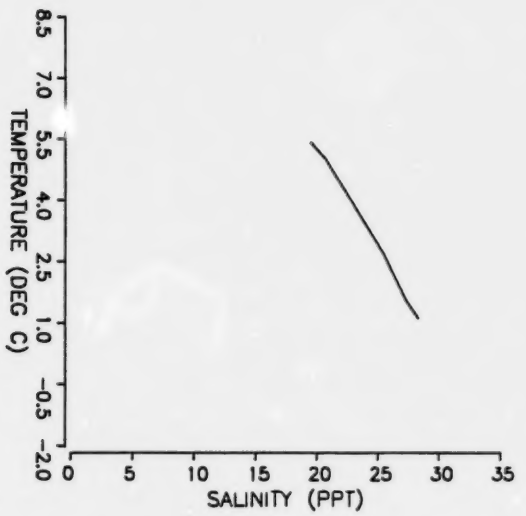
STATION 26 CAST # 5923 DATE : 19:48 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 54.80 N LONG : 135 55.20 W

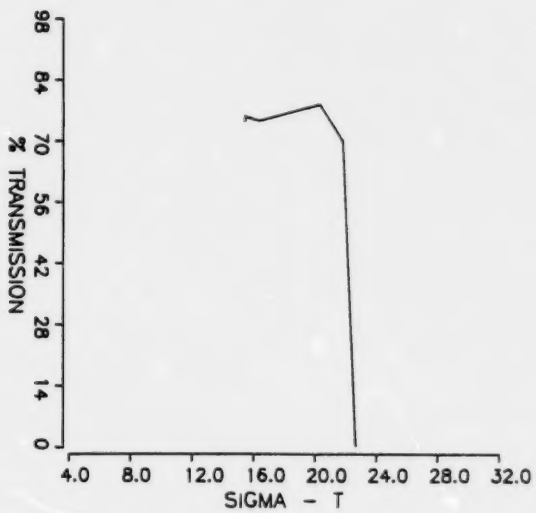
STATION	LAT	LONG	DATE
27	69 49.4 N	135 49.2 W	20:45 GMT ON 13/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	5.43	19.64	74.8	1.16	15.49	6.49	0.37
4.0	5.42	19.65	75.3	1.13	15.50	6.49	0.49
5.0	5.42	19.65	75.8	1.11	15.50	6.49	0.61
6.0	5.42	19.65	75.8	1.11	15.50	6.49	0.73
7.0	5.42	19.65	75.8	1.11	15.50	6.49	0.85
8.0	5.42	19.67	75.8	1.11	15.52	6.49	0.98
9.0	5.04	20.79	74.8	1.16	16.43	6.17	1.09
10.0	2.70	25.57	78.6	0.97	20.38	4.09	1.19
12.0	1.21	28.19	13.5	8.01	22.56	2.76	1.31
14.0	1.12	28.40	0.0	30.91	22.73	2.68	1.42





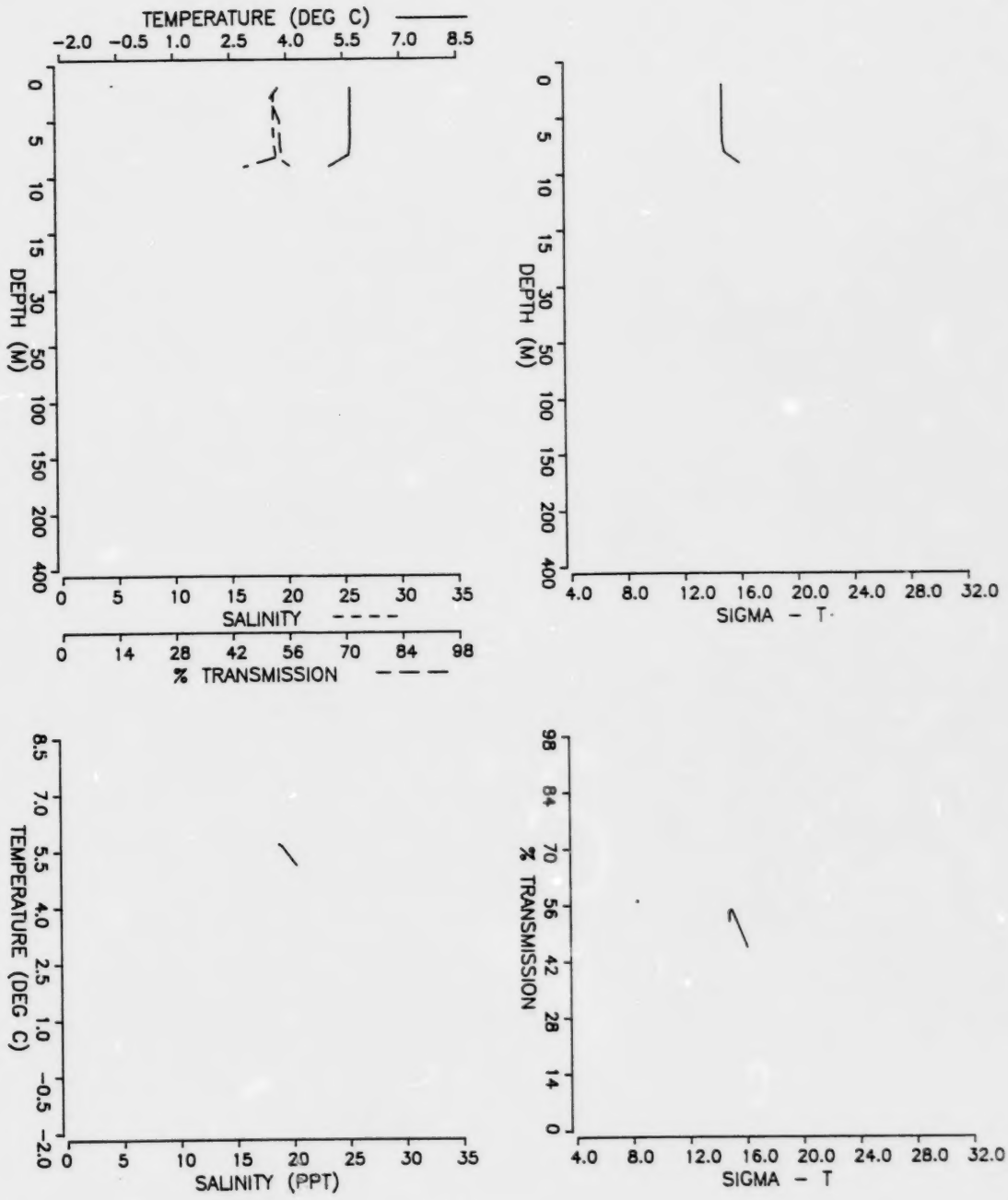




STATION 27 CAST # 5924 DATE : 20:45 ON 13/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 49.40 N LONG : 135 49.20 W

STATION	LAT	LONG	DATE
28	69 44.4 N	135 43.2 W	00:12 GMT ON 14/09/ 86

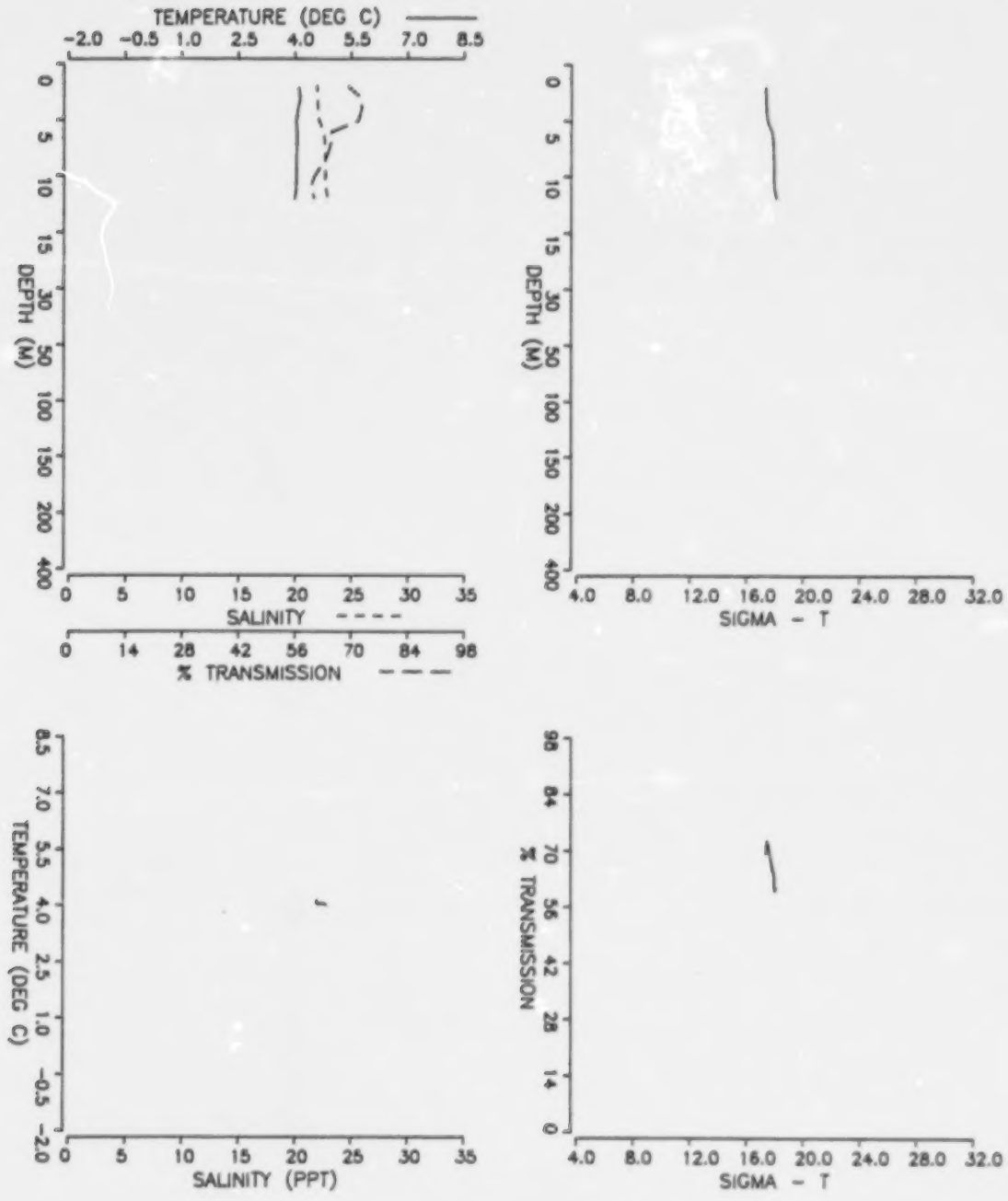
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.71	18.90	54.0	2.46	14.88	6.73	0.26
3.0	5.71	18.90	52.0	2.62	14.88	6.73	0.38
4.0	5.71	18.90	53.2	2.52	14.88	6.73	0.51
5.0	5.70	18.90	54.4	2.44	14.88	6.73	0.64
6.0	5.70	18.90	54.4	2.44	14.88	6.73	0.77
7.0	5.70	18.92	54.5	2.43	14.90	6.73	0.90
8.0	5.67	19.11	54.9	2.40	15.05	6.71	1.02
9.0	5.15	20.45	45.4	3.16	16.15	6.26	1.14



STATION 28 CAST # 5925 DATE : 00:12 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 44.40 N LONG : 135 43.20 W

STATION	LAT	LONG	DATE
29	69 4.8 N	137 42.8 W	06:58 GMT ON 14/09/ 86

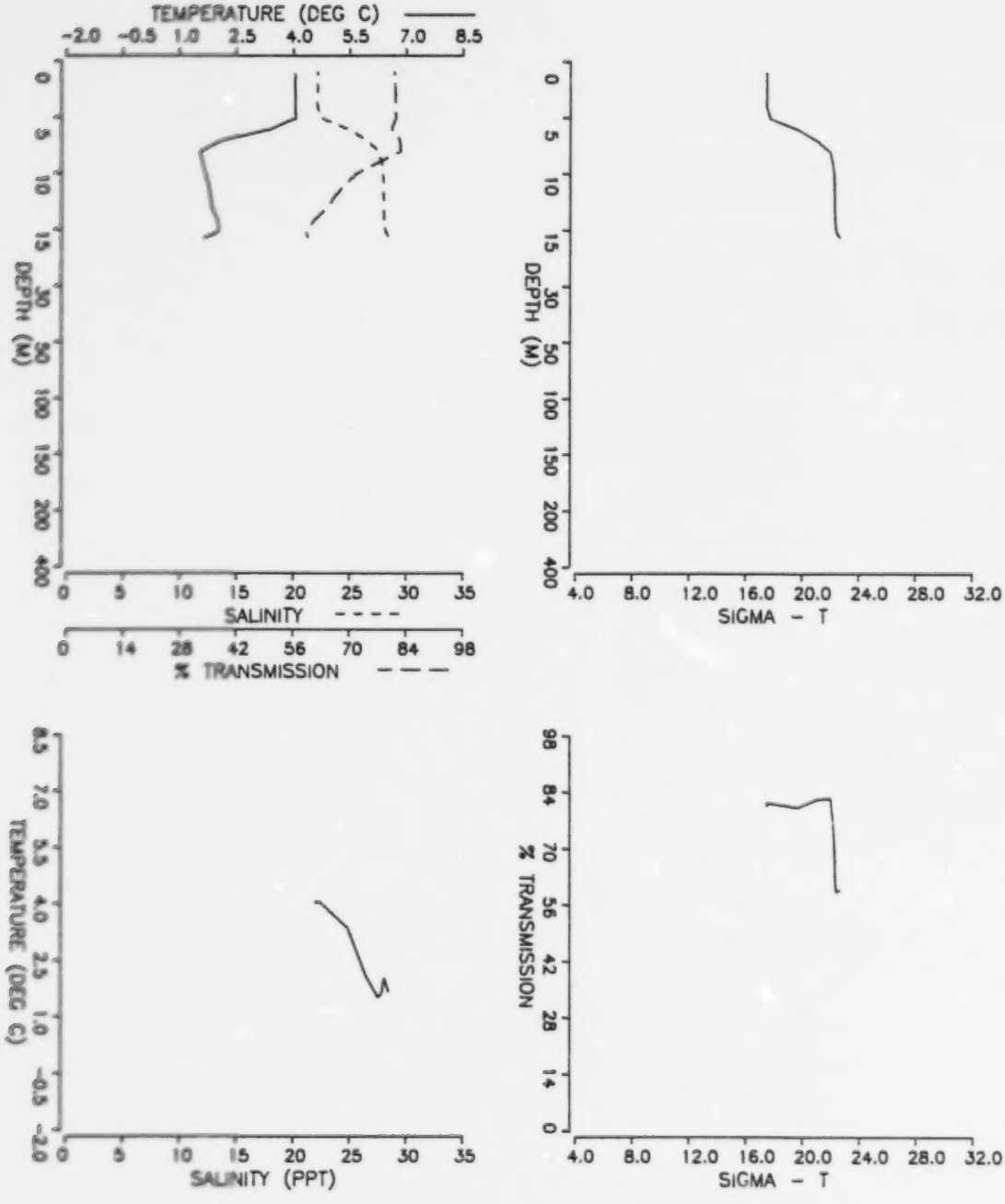
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.11	22.01	69.3	1.47	17.46	5.31	0.21
3.0	4.15	22.03	72.3	1.30	17.48	5.35	0.31
4.0	4.08	22.06	72.6	1.28	17.50	5.28	0.41
5.0	4.05	22.17	71.8	1.32	17.60	5.26	0.51
6.0	4.07	22.60	65.1	1.72	17.94	5.30	0.61
7.0	4.07	22.68	65.0	1.72	17.99	5.30	0.71
8.0	4.06	22.72	64.2	1.77	18.03	5.30	0.81
9.0	4.06	22.74	62.7	1.87	18.04	5.30	0.91
10.0	4.05	22.75	61.0	1.98	18.05	5.29	1.00
12.0	4.01	22.96	61.0	1.98	18.22	5.27	1.20


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION 29 CAST # 5926 DATE : 06:58 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 4.80 N LONG : 137 42.80 W

STATION	LAT	LONG	DATE
30	69 10.8 N	137 48.0 W	08:22 GMT ON 14/09/ 86

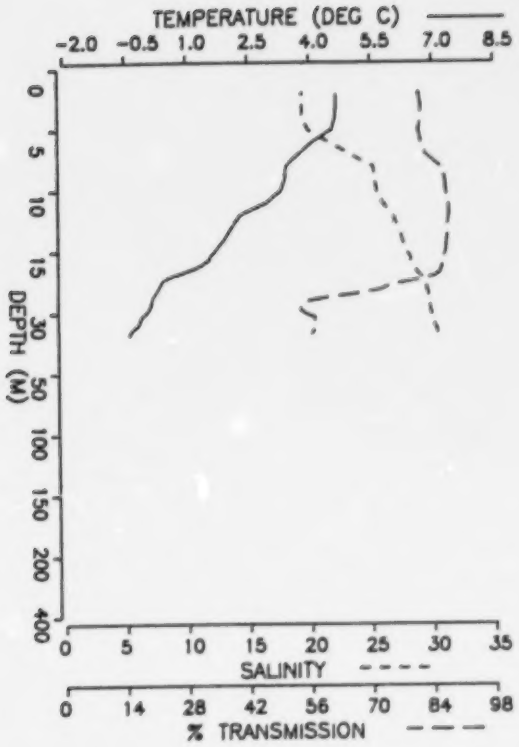
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.07	22.18	81.0	0.84	17.60	5.27	0.10
2.0	4.05	22.18	81.2	0.83	17.60	5.26	0.20
3.0	4.07	22.17	81.2	0.83	17.59	5.27	0.30
4.0	4.07	22.16	81.2	0.83	17.59	5.27	0.41
5.0	4.07	22.47	81.4	0.82	17.83	5.30	0.51
6.0	3.41	24.90	80.3	0.88	19.80	4.76	0.60
7.0	2.12	26.53	82.3	0.78	21.19	3.57	0.67
8.0	1.55	27.59	82.6	0.77	22.07	3.06	0.73
9.0	1.62	27.84	76.9	1.05	22.26	3.15	0.79
10.0	1.69	27.94	71.7	1.33	22.34	3.22	0.84
12.0	1.82	28.01	66.4	1.64	22.39	3.35	0.95
14.0	2.01	28.07	61.5	1.94	22.42	3.55	1.06
16.0	1.94	28.28	59.5	2.08	22.60	3.49	1.17
17.0	1.67	28.54	59.9	2.05	22.82	3.24	1.22

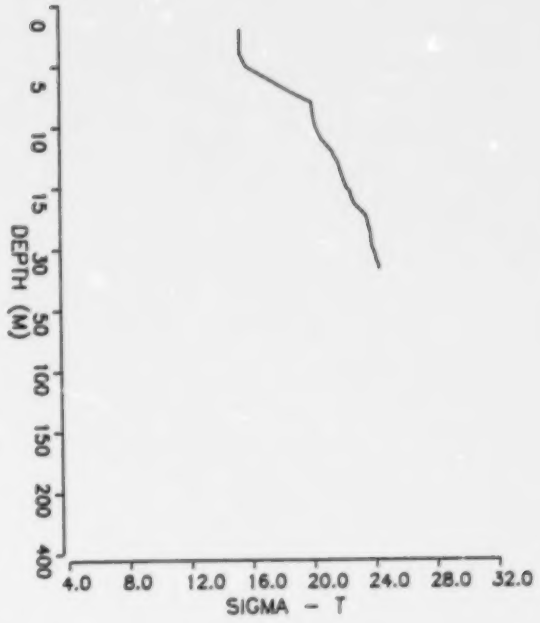

TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

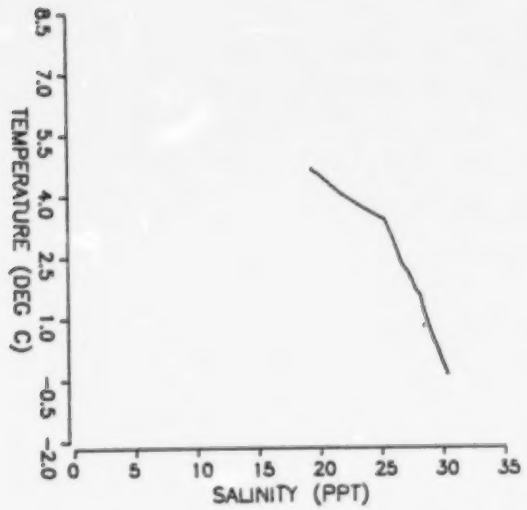
STATION 30 CAST # 5927 DATE : 08:22 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 10.80 N LONG : 137 48.00 W

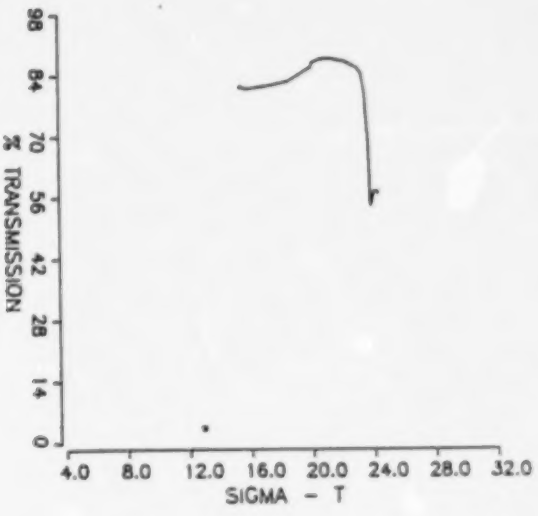
STATION	LAT	LONG	DATE
31	69 16.6 N	137 54.2 W	09:37 GMT ON 14/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.68	19.51	81.1	0.84	15.44	5.73	0.25
3.0	4.68	19.51	81.5	0.82	15.44	5.74	0.37
4.0	4.66	19.51	81.6	0.81	15.45	5.72	0.49
5.0	4.57	20.01	80.9	0.85	15.84	5.65	0.61
6.0	4.11	21.67	81.5	0.82	17.19	5.29	0.72
7.0	3.76	23.41	82.5	0.77	18.60	5.04	0.82
8.0	3.45	25.28	85.8	0.61	20.11	4.83	0.91
9.0	3.43	25.39	86.9	0.56	20.19	4.82	0.98
10.0	3.32	25.55	87.1	0.55	20.33	4.71	1.06
12.0	2.33	26.79	87.8	0.52	21.38	3.80	1.20
14.0	1.92	27.61	87.3	0.54	22.06	3.44	1.32
16.0	1.59	28.22	86.6	0.57	22.57	3.14	1.43
18.0	1.41	28.40	86.4	0.59	22.72	2.97	1.54
20.0	0.94	28.82	85.8	0.61	23.08	2.53	1.64
22.0	0.43	29.41	80.0	0.89	23.58	2.05	1.73
24.0	0.32	29.57	72.5	1.28	23.71	1.95	1.81
26.0	0.19	29.75	60.4	2.02	23.87	1.83	1.90
28.0	0.13	29.81	54.3	2.44	23.92	1.78	1.98
30.0	0.00	29.95	55.4	2.36	24.03	1.66	2.06
35.0	-0.29	30.35	57.3	2.23	24.36	1.40	2.24
37.0	-0.39	30.38	56.6	2.28	24.39	1.29	2.32





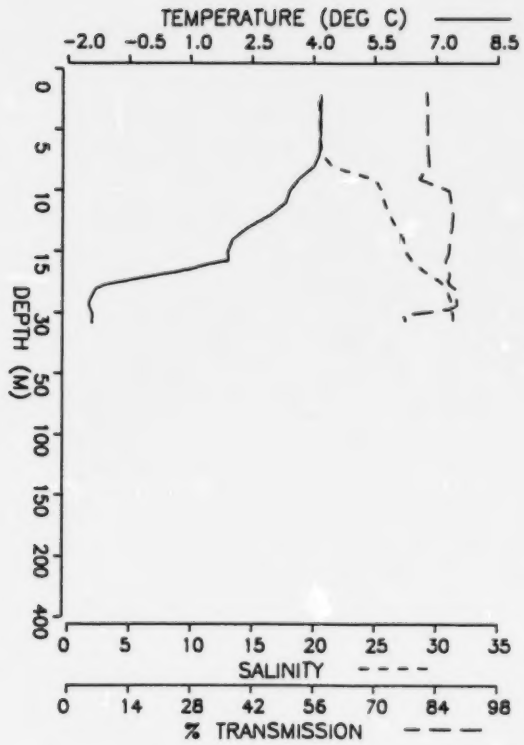


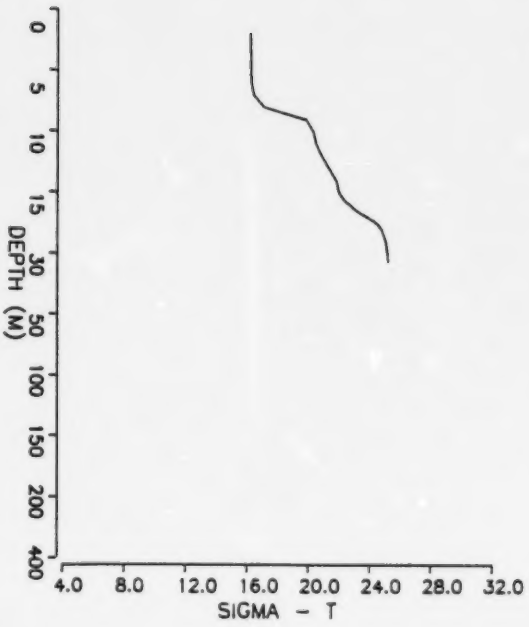


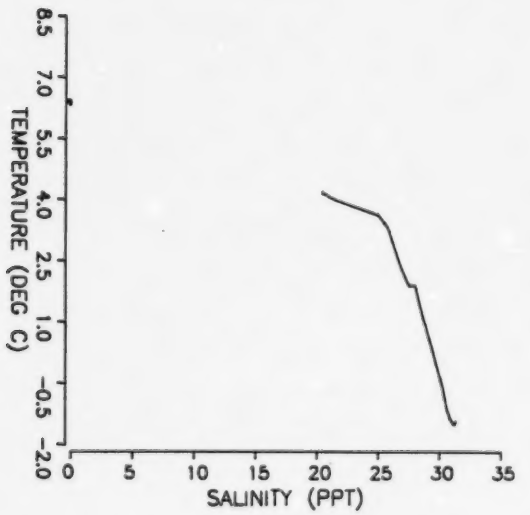
STATION 31 CAST # 5928 DATE : 09:37 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 16.60 N LONG : 137 54.20 W

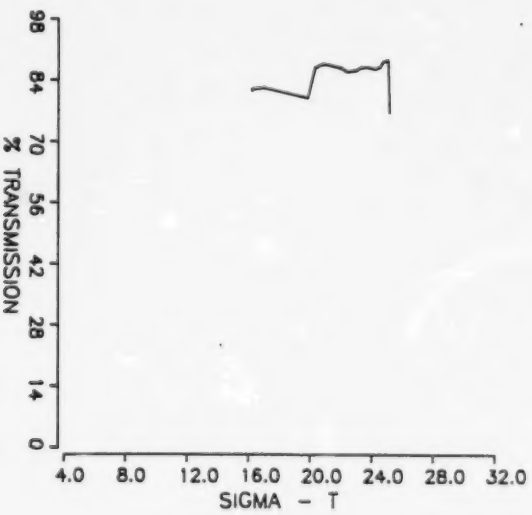
STATION	LAT	LONG	DATE
32	69 22.5 N	137 59.2 W	11:22 GMT ON 14/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.19	20.52	81.8	0.80	16.28	5.31	0.23
3.0	4.19	20.52	82.0	0.79	16.28	5.30	0.34
4.0	4.18	20.54	82.0	0.79	16.29	5.29	0.46
5.0	4.18	20.55	82.0	0.79	16.30	5.29	0.57
6.0	4.17	20.58	82.0	0.79	16.33	5.29	0.69
7.0	4.14	20.77	82.2	0.78	16.48	5.27	0.80
8.0	4.01	21.57	82.4	0.78	17.12	5.19	0.91
9.0	3.65	25.04	80.2	0.88	19.90	5.01	1.00
10.0	3.43	25.61	87.0	0.56	20.37	4.83	1.08
12.0	2.96	26.24	87.9	0.51	20.90	4.39	1.22
14.0	2.03	27.37	87.2	0.55	21.86	3.53	1.35
16.0	1.93	27.82	86.7	0.57	22.22	3.45	1.47
18.0	1.38	28.47	86.3	0.59	22.78	2.95	1.58
20.0	0.59	29.20	87.1	0.55	23.40	2.20	1.67
22.0	-0.56	30.29	86.7	0.57	24.32	1.11	1.75
24.0	-1.33	30.88	88.4	0.49	24.83	0.38	1.82
26.0	-1.43	31.11	88.6	0.48	25.01	0.29	1.88
28.0	-1.49	31.26	88.8	0.48	25.13	0.24	1.94
30.0	-1.40	31.35	79.5	0.92	25.21	0.33	2.00
33.0	-1.41	31.40	77.0	1.04	25.24	0.33	2.08





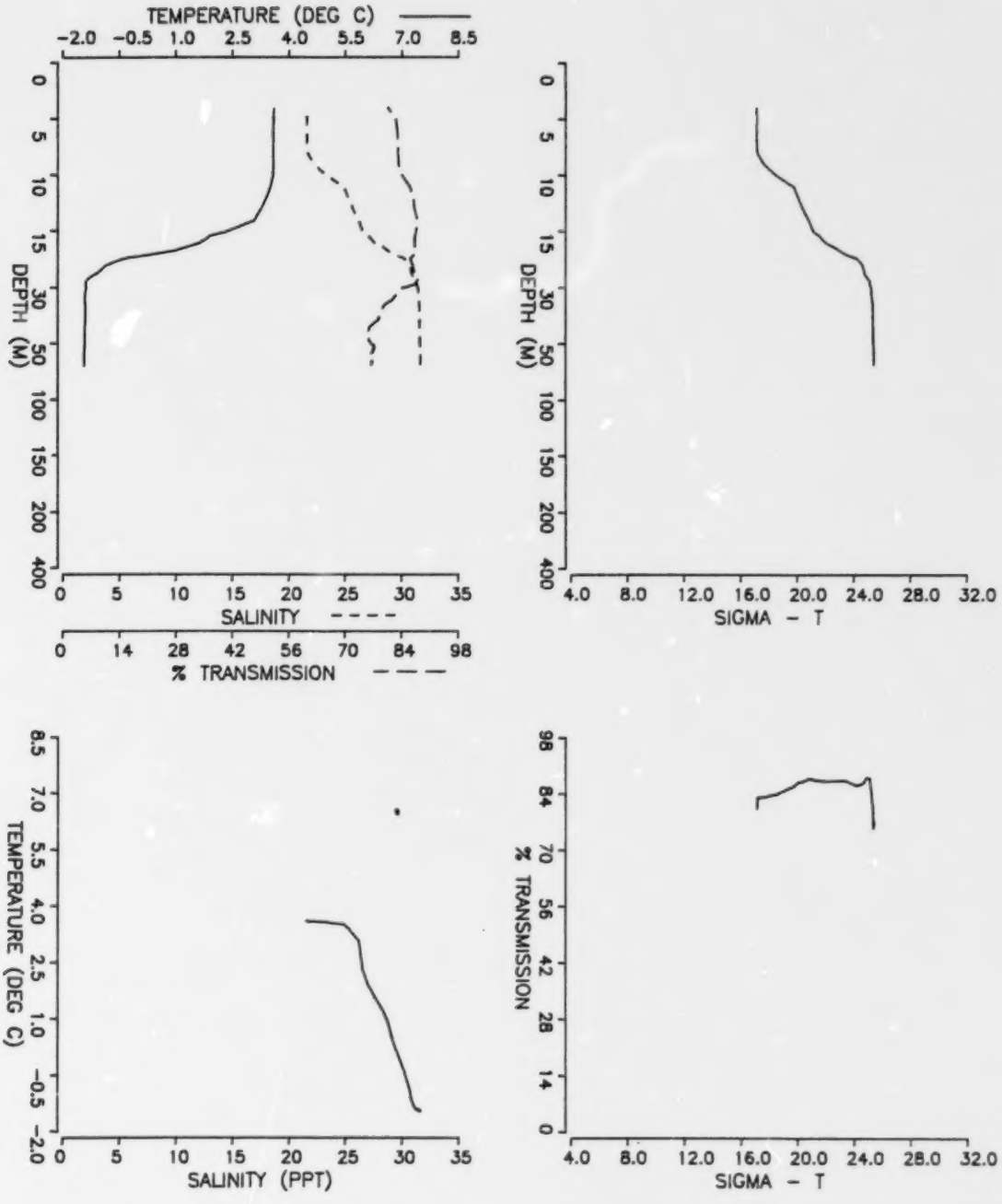




STATION 32 CAST # 5929 DATE : 11:22 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 22.50 N LONG : 137 59.20 W

STATION	LAT	LONG	DATE
33	69 27.5 N	138 5.0 W	12:34 GMT ON 14/09/ 86

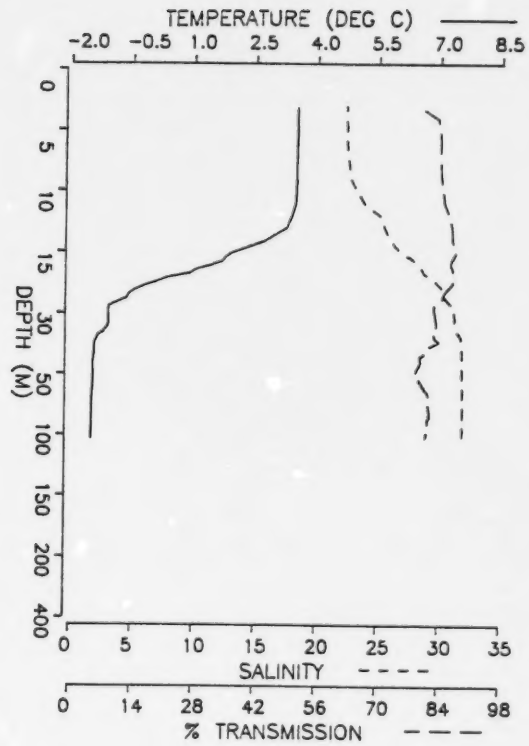
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
4.0	3.62	21.64	80.6	0.86	17.20	4.79	0.42
5.0	3.61	21.64	82.6	0.76	17.21	4.79	0.53
6.0	3.60	21.63	82.9	0.75	17.20	4.77	0.63
7.0	3.60	21.64	83.1	0.74	17.20	4.78	0.74
8.0	3.60	21.70	83.1	0.74	17.25	4.78	0.84
9.0	3.60	22.31	83.3	0.73	17.73	4.82	0.95
10.0	3.59	23.40	84.0	0.70	18.60	4.86	1.04
12.0	3.42	25.30	87.0	0.56	20.12	4.80	1.21
14.0	3.10	26.22	87.9	0.52	20.88	4.53	1.35
16.0	1.92	27.08	87.4	0.54	21.63	3.40	1.48
18.0	1.62	27.63	87.2	0.55	22.09	3.14	1.60
20.0	0.98	28.77	87.4	0.54	23.04	2.56	1.71
22.0	-0.34	30.20	86.2	0.59	24.24	1.33	1.80
24.0	-0.88	30.73	86.8	0.57	24.69	0.81	1.87
26.0	-1.11	30.87	87.3	0.54	24.81	0.59	1.93
28.0	-1.39	31.29	87.9	0.51	25.15	0.34	1.99
30.0	-1.38	31.43	84.2	0.69	25.27	0.36	2.05
35.0	-1.41	31.54	80.9	0.85	25.36	0.34	2.18
40.0	-1.40	31.57	78.5	0.97	25.38	0.35	2.31
45.0	-1.42	31.59	76.0	1.10	25.40	0.34	2.44
50.0	-1.42	31.62	76.6	1.06	25.42	0.35	2.57
55.0	-1.43	31.64	76.9	1.05	25.44	0.34	2.70
60.0	-1.44	31.64	76.9	1.05	25.44	0.34	2.83
65.0	-1.44	31.65	76.8	1.06	25.45	0.34	2.95
69.0	-1.44	31.65	76.4	1.08	25.45	0.34	3.05

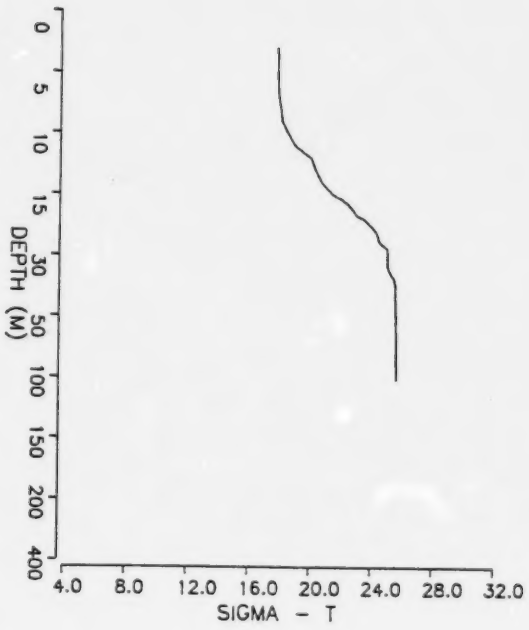


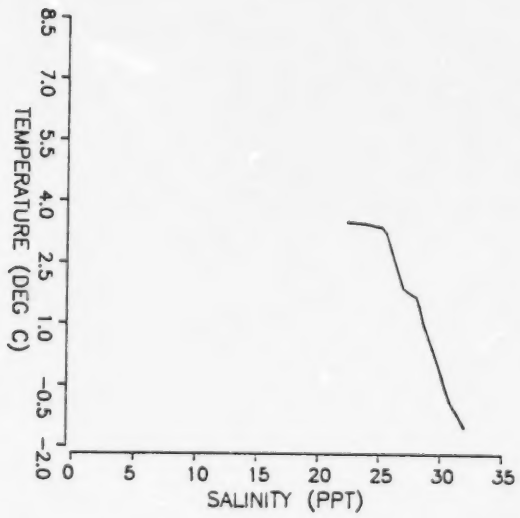
STATION 33 CAST # 5930 DATE : 12:34 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 27.50 N LONG : 138 5.00 W

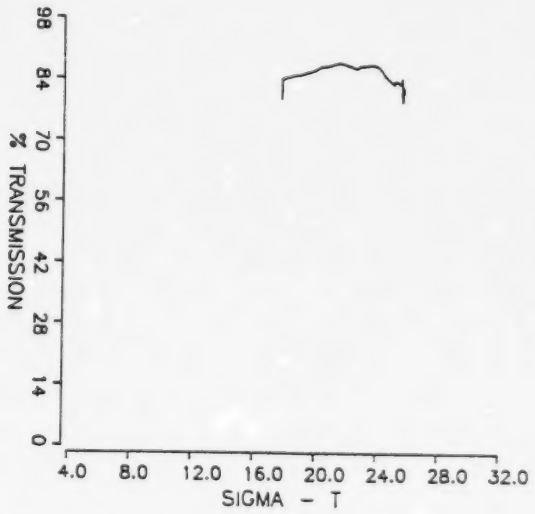
STATION	LAT	LONG	DATE
34	69 33.3 N	138 10.4 W	13:26 GMT ON 14/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	3.52	22.39	79.1	0.94	17.80	4.74	0.30
4.0	3.52	22.41	83.4	0.72	17.82	4.74	0.40
5.0	3.52	22.42	84.0	0.70	17.83	4.74	0.50
6.0	3.52	22.44	84.1	0.69	17.84	4.74	0.60
7.0	3.52	22.51	84.1	0.69	17.90	4.74	0.70
8.0	3.51	22.66	84.2	0.69	18.02	4.74	0.79
9.0	3.51	22.79	84.3	0.68	18.12	4.75	0.89
10.0	3.49	23.28	84.7	0.66	18.51	4.77	0.98
12.0	3.39	25.19	86.1	0.60	20.03	4.77	1.16
14.0	2.75	26.06	86.9	0.56	20.77	4.17	1.31
16.0	1.78	27.60	87.2	0.55	22.06	3.30	1.43
18.0	1.42	28.31	86.5	0.58	22.65	2.97	1.54
20.0	0.91	28.76	87.0	0.56	23.03	2.49	1.64
22.0	0.09	29.73	87.2	0.55	23.85	1.73	1.73
24.0	-0.44	30.29	85.6	0.62	24.32	1.23	1.81
26.0	-0.64	30.49	84.7	0.66	24.49	1.05	1.88
28.0	-1.07	31.17	82.9	0.75	25.06	0.65	1.94
30.0	-1.08	31.22	83.0	0.74	25.09	0.65	2.00
35.0	-1.16	31.38	83.6	0.72	25.22	0.58	2.15
40.0	-1.43	31.84	82.7	0.76	25.61	0.34	2.27
45.0	-1.45	31.87	79.8	0.90	25.63	0.33	2.39
50.0	-1.45	31.89	79.0	0.94	25.64	0.33	2.51
55.0	-1.45	31.90	79.4	0.92	25.65	0.33	2.63
60.0	-1.46	31.90	80.5	0.87	25.66	0.33	2.75
65.0	-1.47	31.92	81.5	0.82	25.67	0.32	2.86
70.0	-1.48	31.92	81.8	0.80	25.67	0.32	2.98
75.0	-1.48	31.93	81.7	0.81	25.68	0.32	3.09
80.0	-1.48	31.93	81.9	0.80	25.68	0.33	3.21
85.0	-1.48	31.94	81.8	0.80	25.68	0.33	3.33
90.0	-1.48	31.94	81.5	0.82	25.69	0.33	3.44
95.0	-1.48	31.95	81.3	0.83	25.69	0.33	3.56
100.0	-1.48	31.95	81.2	0.83	25.69	0.34	3.67
102.0	-1.49	31.96	80.8	0.85	25.70	0.34	3.72





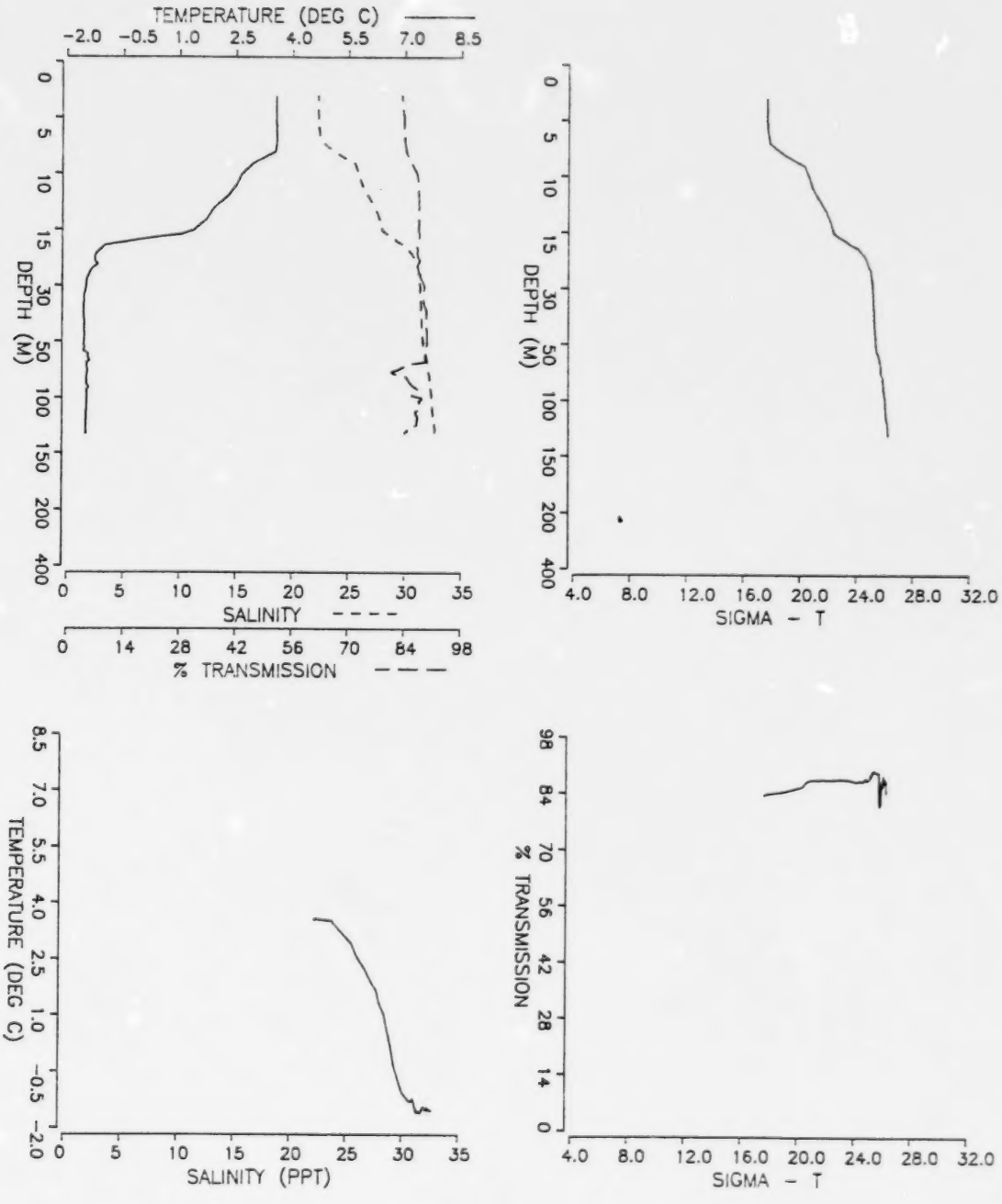




STATION 34 CAST # 5931 DATE : 13:26 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 33.30 N LONG : 138 10.40 W

STATION	LAT	LONG	DATE
35	69 39.1 N	138 16.5 W	14:20 GMT ON 14/09/ 86

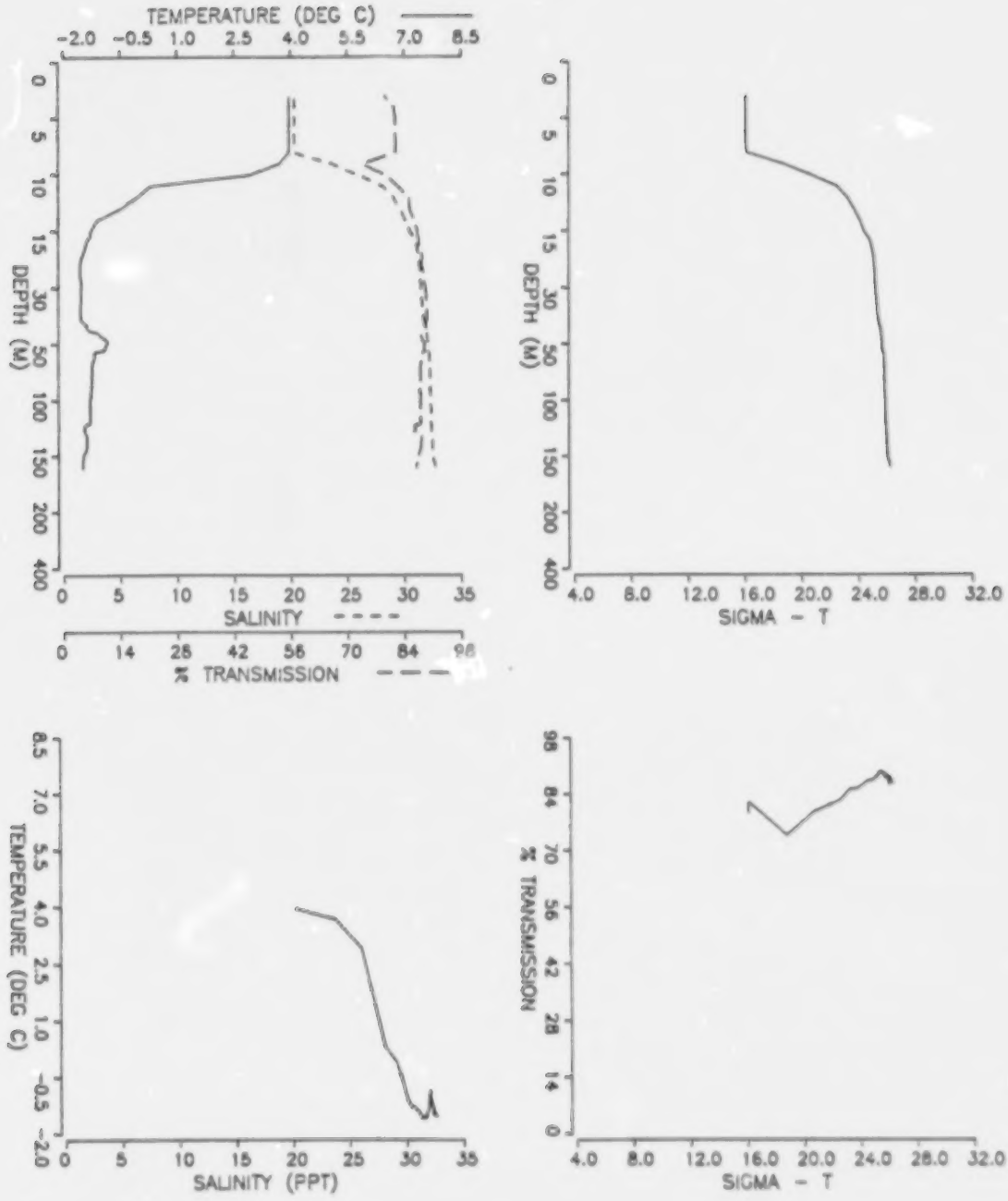
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	3.57	22.29	83.2	0.74	17.72	4.78	0.30
4.0	3.57	22.30	83.4	0.72	17.73	4.78	0.40
5.0	3.57	22.31	83.7	0.71	17.74	4.79	0.50
6.0	3.58	22.37	83.7	0.71	17.78	4.80	0.60
7.0	3.59	22.54	83.9	0.70	17.91	4.82	0.70
8.0	3.54	23.79	84.3	0.68	18.91	4.84	0.79
9.0	2.95	25.55	85.7	0.62	20.36	4.35	0.88
10.0	2.65	25.94	87.0	0.56	20.68	4.07	0.95
12.0	2.28	26.77	87.4	0.54	21.37	3.74	1.09
14.0	1.71	27.78	87.4	0.54	22.21	3.23	1.21
16.0	1.07	28.44	87.6	0.53	22.77	2.63	1.31
18.0	-0.36	29.37	87.5	0.54	23.58	1.26	1.41
20.0	-1.10	30.29	87.2	0.55	24.34	0.57	1.49
22.0	-1.27	30.76	87.3	0.55	24.72	0.43	1.55
24.0	-1.19	31.02	87.2	0.55	24.94	0.53	1.62
26.0	-1.41	31.21	87.8	0.52	25.09	0.32	1.68
28.0	-1.49	31.30	88.1	0.51	25.17	0.24	1.73
30.0	-1.51	31.34	88.8	0.47	25.20	0.23	1.79
35.0	-1.56	31.40	88.7	0.48	25.25	0.18	1.93
40.0	-1.56	31.45	89.3	0.45	25.29	0.19	2.06
45.0	-1.55	31.53	89.4	0.45	25.35	0.21	2.20
50.0	-1.56	31.62	89.6	0.44	25.43	0.21	2.33
55.0	-1.54	31.68	89.4	0.45	25.47	0.24	2.45
60.0	-1.45	31.86	89.2	0.46	25.62	0.34	2.58
65.0	-1.42	31.96	89.2	0.46	25.70	0.38	2.69
70.0	-1.48	32.03	84.4	0.68	25.76	0.32	2.81
75.0	-1.46	32.07	81.2	0.83	25.79	0.35	2.92
80.0	-1.49	32.20	84.2	0.69	25.90	0.34	3.03
85.0	-1.49	32.23	85.2	0.64	25.92	0.34	3.13
90.0	-1.42	32.28	86.8	0.56	25.96	0.41	3.23
95.0	-1.48	32.34	86.1	0.60	26.01	0.36	3.33
100.0	-1.48	32.41	88.4	0.49	26.06	0.37	3.43
110.0	-1.49	32.46	87.8	0.52	26.11	0.37	3.63
120.0	-1.50	32.61	87.1	0.55	26.23	0.37	3.81
130.0	-1.51	32.66	84.3	0.68	26.28	0.38	3.99
132.0	-1.51	32.67	84.1	0.69	26.28	0.38	4.02



STATION 35 CAST # 5932 DATE : 14:20 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 39.10 N LONG : 138 16.50 W

STATION	LAT	LONG	DATE
36	69 44.7 N	138 21.8 W	15:46 GMT ON 14/09/ 86

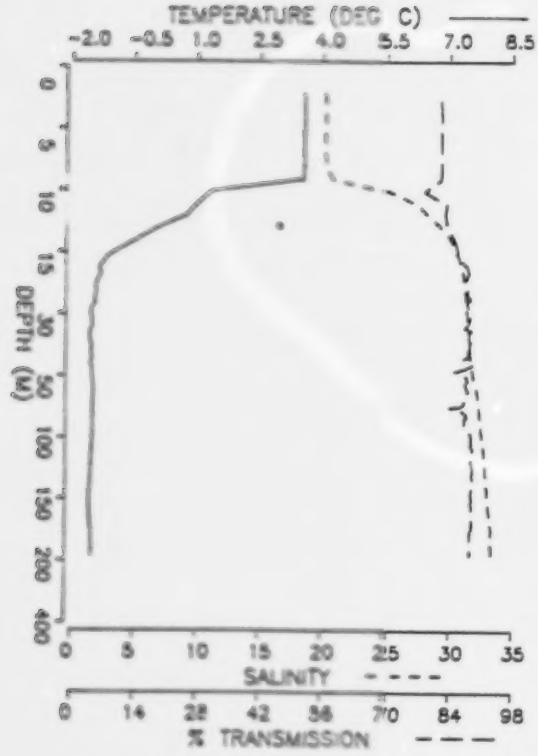
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	3.97	20.37	79.4	0.92	16.17	5.07	0.35
4.0	3.97	20.38	81.6	0.81	16.18	5.07	0.46
5.0	3.97	20.38	81.9	0.80	16.18	5.08	0.58
6.0	3.97	20.38	82.0	0.80	16.18	5.08	0.69
7.0	3.97	20.37	82.0	0.79	16.17	5.08	0.81
8.0	3.97	20.47	82.0	0.80	16.25	5.08	0.92
9.0	3.71	23.74	73.8	1.21	18.86	5.00	1.02
10.0	2.95	26.09	79.7	0.91	20.79	4.37	1.10
12.0	-0.05	29.10	85.3	0.63	23.35	1.55	1.22
14.0	-1.10	30.17	86.5	0.58	24.24	0.55	1.30
16.0	-1.28	30.75	87.4	0.54	24.72	0.41	1.37
18.0	-1.40	31.08	87.6	0.53	24.99	0.31	1.43
20.0	-1.46	31.24	88.3	0.50	25.12	0.26	1.49
22.0	-1.54	31.34	88.5	0.49	25.20	0.19	1.54
24.0	-1.56	31.40	88.3	0.50	25.25	0.17	1.60
26.0	-1.57	31.45	88.8	0.48	25.29	0.17	1.65
28.0	-1.54	31.47	89.0	0.47	25.30	0.20	1.71
30.0	-1.54	31.50	89.3	0.45	25.33	0.20	1.76
35.0	-1.55	31.60	89.6	0.44	25.41	0.20	1.89
40.0	-1.56	31.70	89.7	0.44	25.49	0.20	2.02
45.0	-1.33	31.95	89.5	0.45	25.69	0.45	2.14
50.0	-0.87	32.10	89.1	0.46	25.80	0.92	2.25
55.0	-0.93	32.11	89.1	0.46	25.81	0.87	2.36
60.0	-1.19	32.23	88.5	0.49	25.92	0.62	2.47
65.0	-1.23	32.26	88.4	0.50	25.94	0.58	2.57
70.0	-1.25	32.26	88.0	0.51	25.94	0.57	2.68
75.0	-1.25	32.27	88.0	0.51	25.95	0.57	2.78
80.0	-1.26	32.28	88.1	0.51	25.96	0.57	2.88
85.0	-1.27	32.29	88.1	0.51	25.97	0.57	2.99
90.0	-1.27	32.30	87.9	0.51	25.98	0.56	3.09
95.0	-1.29	32.32	88.1	0.51	25.99	0.55	3.19
100.0	-1.31	32.34	88.1	0.51	26.00	0.53	3.29
110.0	-1.31	32.35	88.1	0.51	26.01	0.55	3.49
120.0	-1.30	32.35	88.1	0.51	26.01	0.55	3.69
130.0	-1.40	32.43	87.9	0.51	26.08	0.47	3.88
140.0	-1.39	32.46	88.1	0.50	26.11	0.49	4.08
150.0	-1.49	32.51	87.5	0.53	26.15	0.40	4.26
160.0	-1.51	32.69	87.0	0.56	26.29	0.40	4.44

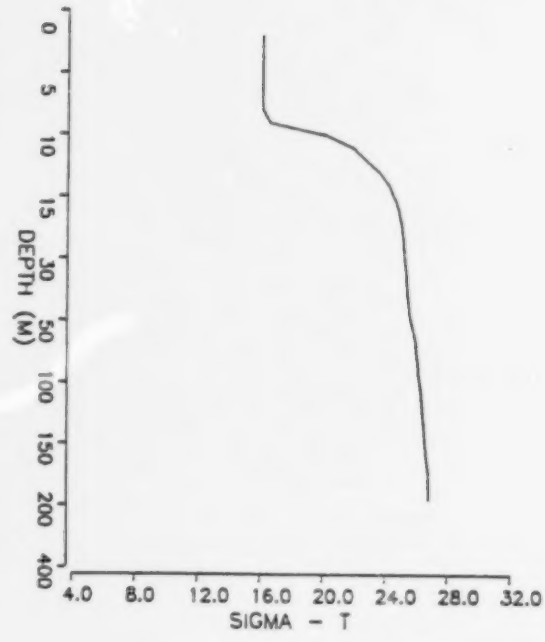


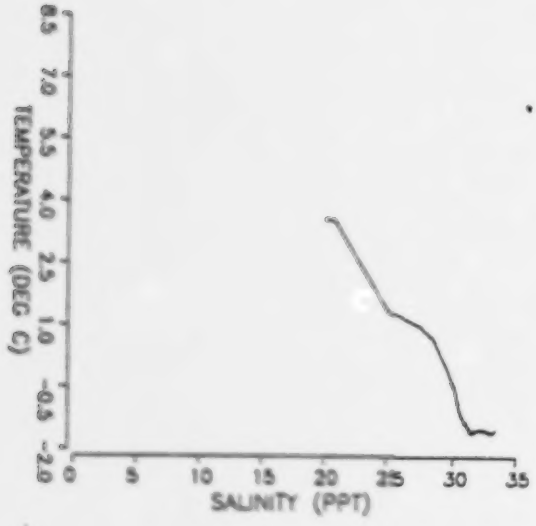
STATION 36 CAST # 5933 DATE : 15:46 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 44.70 N LONG : 138 21.80 W

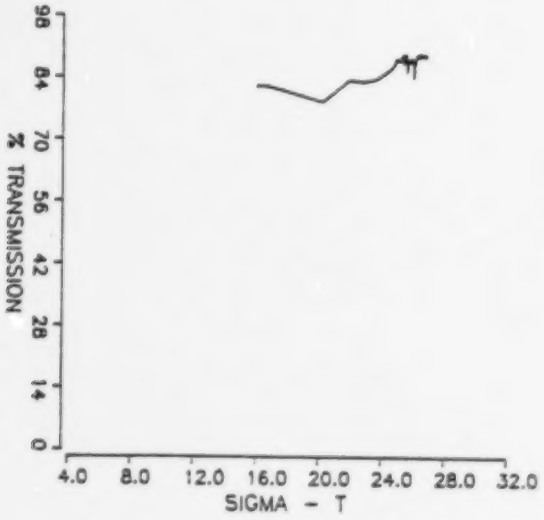
STATION	LAT	LONG	DATE
37	69 50.0 N	138 27.0 W	16:43 GMT ON 14/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	3.58	20.26	81.8	0.80	16.11	4.67	0.23
3.0	3.58	20.26	82.0	0.79	16.11	4.67	0.35
4.0	3.57	20.26	82.2	0.79	16.11	4.67	0.46
5.0	3.57	20.26	82.1	0.79	16.11	4.68	0.58
6.0	3.57	20.26	82.1	0.79	16.11	4.67	0.70
7.0	3.57	20.27	82.2	0.79	16.11	4.67	0.81
8.0	3.57	20.29	82.2	0.78	16.14	4.67	0.93
9.0	3.56	20.89	82.1	0.79	16.61	4.70	1.04
10.0	1.35	25.27	78.5	0.97	20.22	2.73	1.14
12.0	0.73	28.41	83.1	0.74	22.76	2.29	1.26
14.0	-0.49	30.20	85.2	0.64	24.25	1.17	1.34
16.0	-1.17	30.76	86.7	0.57	24.72	0.52	1.41
18.0	-1.32	30.95	87.9	0.51	24.88	0.39	1.48
20.0	-1.29	31.08	88.3	0.50	24.99	0.42	1.54
22.0	-1.41	31.20	88.0	0.51	25.09	0.32	1.60
24.0	-1.42	31.25	88.1	0.50	25.13	0.31	1.65
26.0	-1.47	31.33	88.8	0.48	25.19	0.27	1.71
28.0	-1.52	31.39	88.3	0.50	25.24	0.22	1.77
30.0	-1.55	31.44	89.0	0.47	25.28	0.19	1.82
35.0	-1.56	31.55	88.9	0.47	25.37	0.19	1.95
40.0	-1.52	31.63	88.7	0.48	25.43	0.24	2.08
45.0	-1.55	31.76	88.4	0.49	25.54	0.22	2.21
50.0	-1.50	31.95	87.9	0.51	25.69	0.28	2.33
55.0	-1.49	32.07	87.6	0.53	25.79	0.31	2.44
60.0	-1.47	32.19	88.0	0.51	25.89	0.33	2.55
65.0	-1.48	32.27	88.0	0.51	25.96	0.34	2.65
70.0	-1.49	32.34	87.3	0.54	26.01	0.33	2.76
75.0	-1.49	32.38	85.4	0.63	26.04	0.34	2.85
80.0	-1.49	32.43	87.7	0.53	26.08	0.35	2.95
85.0	-1.49	32.48	87.4	0.54	26.13	0.35	3.05
90.0	-1.49	32.52	87.8	0.52	26.15	0.36	3.14
95.0	-1.48	32.57	88.7	0.48	26.19	0.38	3.23
100.0	-1.50	32.64	88.9	0.47	26.25	0.36	3.32
110.0	-1.51	32.75	89.3	0.45	26.34	0.37	3.50
120.0	-1.52	32.83	89.0	0.46	26.41	0.36	3.66
130.0	-1.54	32.91	89.1	0.46	26.48	0.36	3.82
140.0	-1.56	32.99	89.1	0.46	26.54	0.35	3.97
150.0	-1.56	33.06	89.0	0.47	26.60	0.36	4.12
175.0	-1.51	33.34	88.7	0.48	26.82	0.44	4.45
195.0	-1.51	33.36	88.7	0.48	26.84	0.47	4.69





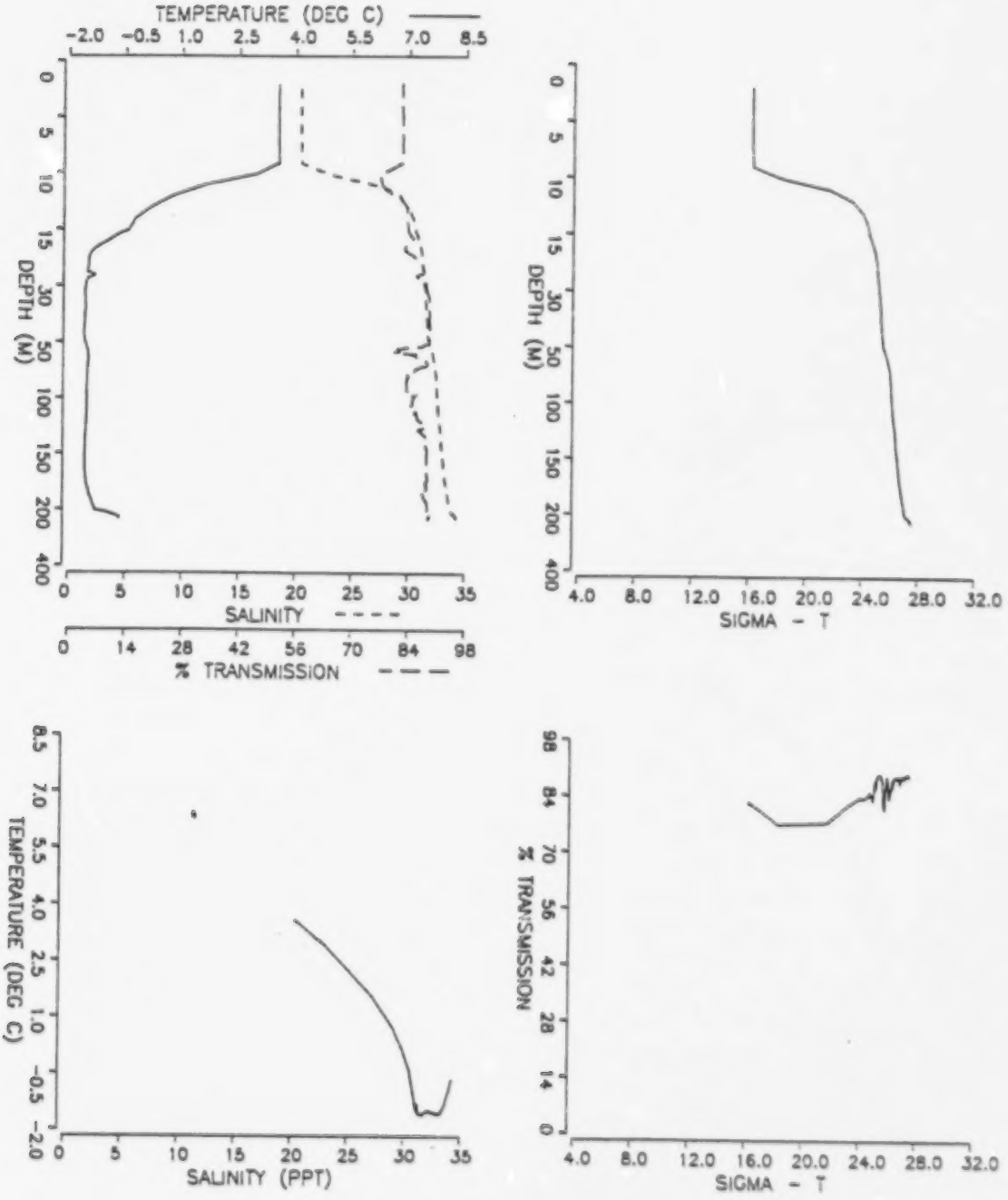




STATION 37 CAST # 5934 DATE : 16:43 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 50.00 N LOING : 138 27.00 W

STATION	LAT	LONG	DATE
38	69 55.2 N	138 32.6 W	17:42 GMT ON 14/09/ 86

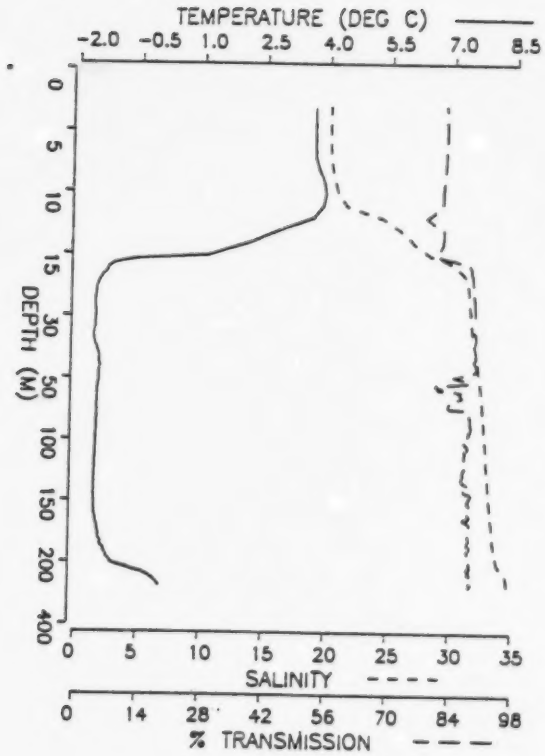
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	3.55	20.47	82.2	0.78	16.28	4.66	0.23
3.0	3.55	20.47	82.2	0.78	16.28	4.66	0.34
4.0	3.55	20.47	82.3	0.78	16.28	4.66	0.46
5.0	3.55	20.47	82.3	0.78	16.28	4.66	0.57
6.0	3.55	20.47	82.4	0.78	16.28	4.66	0.69
7.0	3.55	20.48	82.4	0.77	16.28	4.67	0.80
8.0	3.56	20.48	82.4	0.77	16.29	4.67	0.91
9.0	3.56	20.52	82.4	0.78	16.32	4.68	1.03
10.0	2.96	22.99	76.9	1.05	18.31	4.22	1.13
12.0	0.77	29.09	81.8	0.80	23.31	2.36	1.26
14.0	-0.24	30.44	83.6	0.72	24.44	1.43	1.34
16.0	-0.66	30.77	84.4	0.68	24.71	1.03	1.41
18.0	-0.98	30.96	84.5	0.63	24.88	0.73	1.47
20.0	-1.29	31.12	83.0	0.75	25.02	0.42	1.54
22.0	-1.45	31.22	85.7	0.62	25.10	0.27	1.59
24.0	-1.47	31.28	87.1	0.55	25.15	0.25	1.65
26.0	-1.51	31.33	87.9	0.52	25.19	0.22	1.71
28.0	-1.50	31.39	86.9	0.56	25.24	0.23	1.76
30.0	-1.56	31.45	88.4	0.49	25.29	0.19	1.82
35.0	-1.55	31.56	89.2	0.46	25.38	0.20	1.95
40.0	-1.57	31.65	89.2	0.46	25.45	0.19	2.08
45.0	-1.58	31.71	89.4	0.45	25.51	0.19	2.20
50.0	-1.55	31.85	89.3	0.45	25.61	0.23	2.33
55.0	-1.51	32.01	81.5	0.82	25.75	0.28	2.44
60.0	-1.47	32.18	86.2	0.60	25.88	0.33	2.55
65.0	-1.46	32.29	88.1	0.51	25.97	0.35	2.66
70.0	-1.48	32.40	88.5	0.49	26.06	0.34	2.76
75.0	-1.49	32.44	85.7	0.62	26.09	0.34	2.85
80.0	-1.50	32.49	84.2	0.69	26.13	0.34	2.95
85.0	-1.50	32.53	83.7	0.71	26.16	0.34	3.04
90.0	-1.50	32.55	83.7	0.71	26.18	0.35	3.13
95.0	-1.50	32.58	85.9	0.61	26.20	0.35	3.22
100.0	-1.51	32.61	85.4	0.63	26.23	0.35	3.31
110.0	-1.51	32.67	86.0	0.60	26.28	0.36	3.49
120.0	-1.52	32.78	87.5	0.54	26.37	0.37	3.66
130.0	-1.53	32.88	87.6	0.53	26.45	0.37	3.82
140.0	-1.55	32.95	88.4	0.49	26.51	0.36	3.98
150.0	-1.55	33.06	88.7	0.48	26.60	0.37	4.12
175.0	-1.52	33.35	88.4	0.49	26.83	0.43	4.46
200.0	-1.27	33.75	88.8	0.47	27.15	0.72	4.72
225.0	-0.65	34.29	89.1	0.46	27.56	1.40	4.89
230.0	-0.65	34.29	89.1	0.46	27.57	1.40	4.91

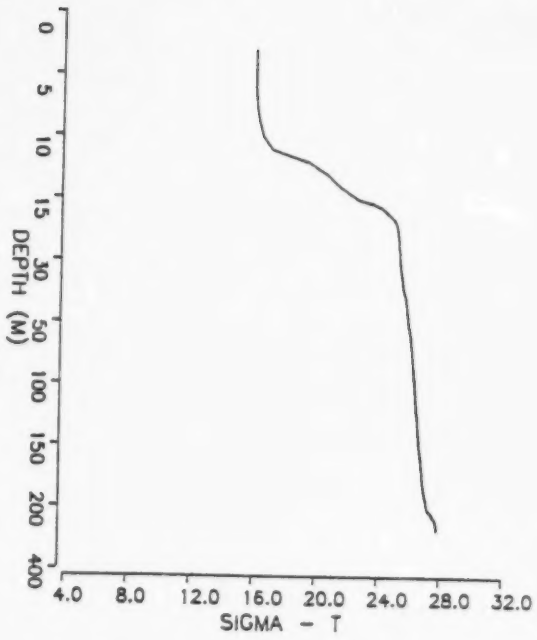


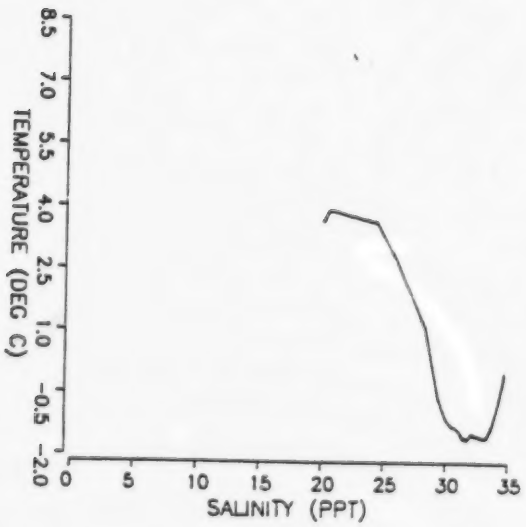
STATION 38 CAST # 5935 DATE : 17:42 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 55.20 N LONG : 138 32.60 W

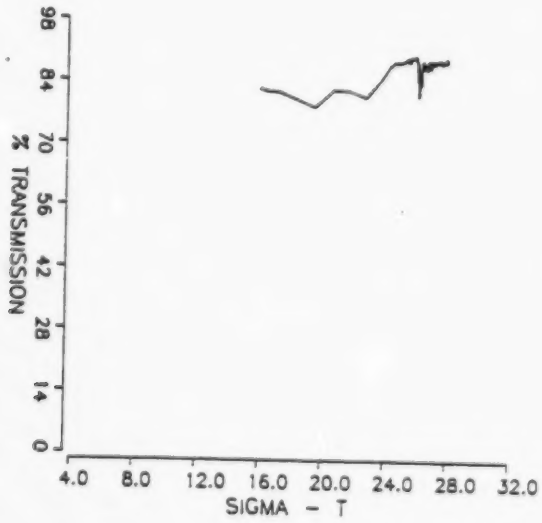
STATION	LAT	LONG	DATE
39	70 1.0 N	138 38.0 W	19:49 GMT ON 14/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
3.0	3.68	20.11	82.3	0.78	15.99	4.77	0.35
4.0	3.67	20.11	82.5	0.77	15.99	4.77	0.47
5.0	3.67	20.12	82.5	0.77	15.99	4.77	0.59
6.0	3.67	20.11	82.5	0.77	15.99	4.77	0.70
7.0	3.69	20.17	82.4	0.77	16.03	4.78	0.82
8.0	3.76	20.29	82.3	0.78	16.12	4.86	0.94
9.0	3.89	20.49	82.1	0.79	16.27	5.00	1.05
10.0	3.94	20.79	81.8	0.80	16.51	5.07	1.17
12.0	3.65	24.40	78.3	0.98	19.39	4.98	1.37
14.0	2.10	26.93	82.1	0.79	21.51	3.58	1.52
16.0	-0.61	29.46	84.6	0.67	23.66	1.01	1.62
18.0	-1.25	30.50	88.4	0.49	24.51	0.43	1.70
20.0	-1.39	31.12	88.7	0.48	25.02	0.33	1.76
22.0	-1.50	31.34	88.9	0.47	25.20	0.23	1.82
24.0	-1.54	31.42	88.9	0.47	25.26	0.19	1.87
26.0	-1.56	31.46	89.2	0.46	25.30	0.18	1.93
28.0	-1.55	31.52	89.3	0.45	25.35	0.19	1.98
30.0	-1.56	31.57	89.3	0.45	25.39	0.19	2.03
35.0	-1.59	31.72	89.5	0.45	25.51	0.17	2.16
40.0	-1.52	31.93	89.6	0.44	25.68	0.26	2.28
45.0	-1.45	32.16	89.5	0.44	25.86	0.35	2.39
50.0	-1.47	32.28	87.5	0.54	25.96	0.34	2.50
55.0	-1.48	32.37	80.7	0.86	26.04	0.33	2.60
60.0	-1.49	32.46	86.5	0.58	26.11	0.33	2.69
65.0	-1.49	32.50	86.3	0.59	26.14	0.33	2.79
70.0	-1.50	32.56	83.7	0.71	26.19	0.34	2.88
75.0	-1.50	32.60	88.1	0.51	26.22	0.34	2.97
80.0	-1.50	32.64	88.4	0.49	26.26	0.35	3.06
85.0	-1.50	32.68	88.5	0.49	26.29	0.35	3.15
90.0	-1.51	32.72	88.7	0.48	26.32	0.35	3.23
95.0	-1.52	32.77	88.1	0.51	26.36	0.35	3.32
100.0	-1.52	32.79	87.1	0.55	26.38	0.35	3.40
110.0	-1.53	32.87	87.3	0.54	26.45	0.35	3.56
120.0	-1.54	32.93	87.6	0.53	26.49	0.35	3.72
130.0	-1.55	33.04	86.7	0.57	26.58	0.36	3.87
140.0	-1.55	33.10	87.2	0.55	26.63	0.37	4.01
150.0	-1.54	33.19	88.2	0.50	26.70	0.39	4.15
175.0	-1.43	33.46	88.5	0.49	26.92	0.53	4.45
200.0	-1.11	33.88	88.7	0.48	27.25	0.90	4.70
225.0	-0.51	34.37	88.6	0.48	27.62	1.54	4.85
250.0	-0.10	34.64	89.1	0.46	27.82	1.98	4.94
271.0	0.05	34.70	88.6	0.48	27.86	2.15	4.99





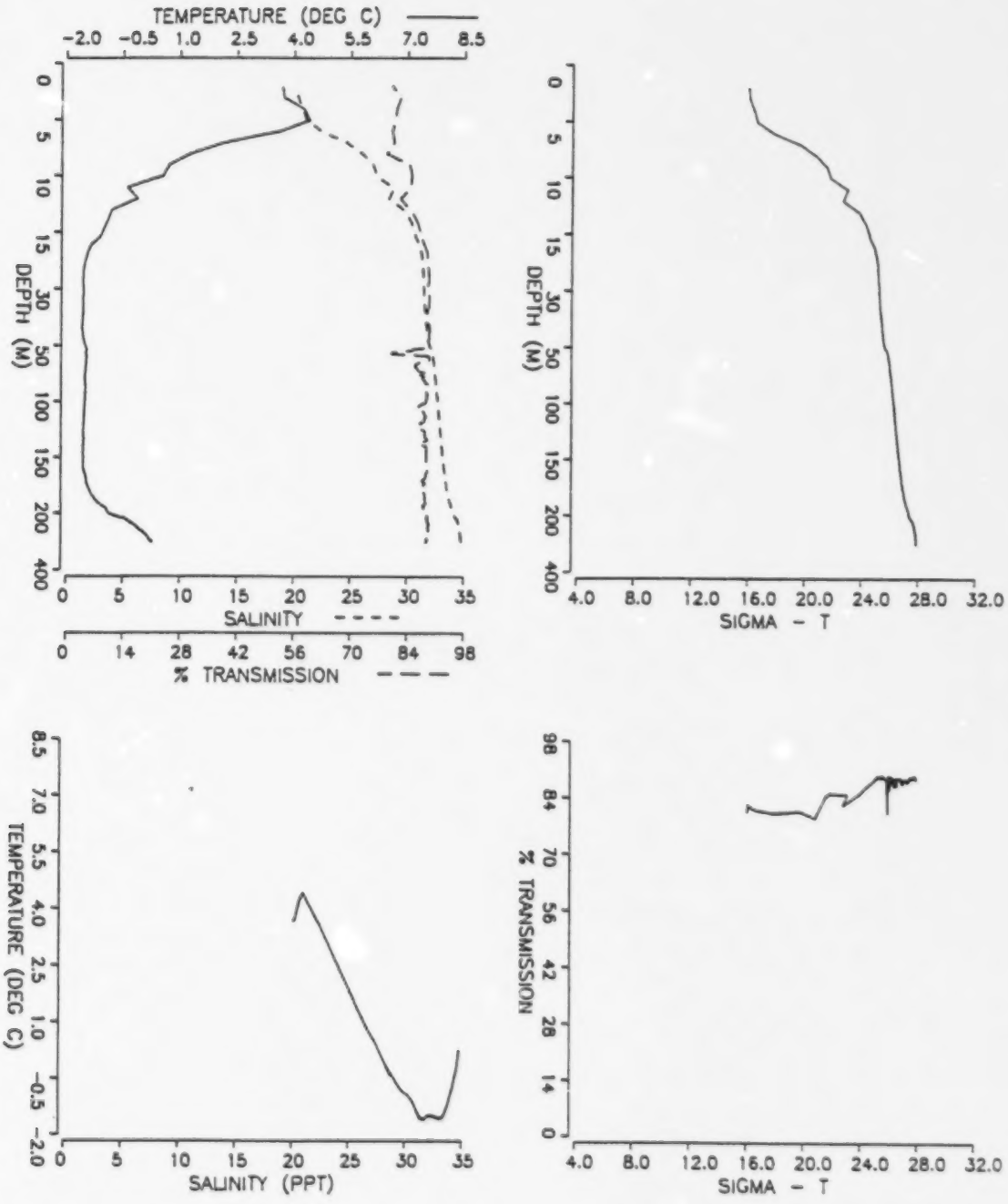




STATION 39 CAST # 5936 DATE : 19:49 GMT ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 1.00 N LONG : 138 38.00 W

STATION	LAT	LONG	DATE
40	70 6.8 N	138 43.9 W	20:59 GMT ON 14/09/ 86

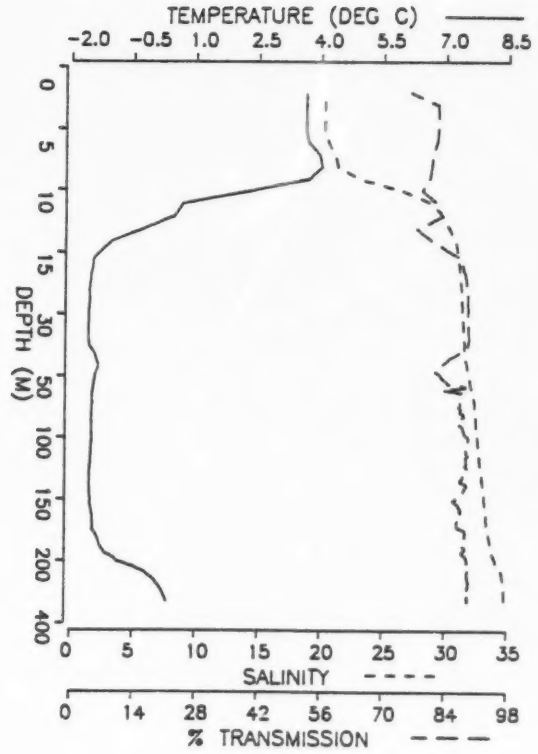
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	3.69	20.24	80.2	0.88	16.09	4.79	0.23
3.0	3.75	20.34	82.3	0.78	16.16	4.85	0.35
4.0	4.25	20.77	81.3	0.83	16.47	5.38	0.46
5.0	4.41	21.08	81.0	0.85	16.70	5.55	0.57
6.0	3.63	22.47	80.2	0.88	17.86	4.86	0.68
7.0	2.16	24.71	80.7	0.86	19.73	3.50	0.77
8.0	1.28	26.03	79.0	0.94	20.83	2.70	0.84
9.0	0.71	27.00	84.5	0.67	21.63	2.19	0.91
10.0	0.55	27.32	85.1	0.65	21.89	2.04	0.97
12.0	-0.12	28.40	82.3	0.78	22.78	1.13	1.07
14.0	-0.93	30.34	86.5	0.58	24.38	0.74	1.16
16.0	-1.11	30.74	87.5	0.53	24.71	0.58	1.23
18.0	-1.34	31.07	88.2	0.50	24.98	0.37	1.29
20.0	-1.43	31.22	88.9	0.47	25.10	0.29	1.35
22.0	-1.50	31.32	89.0	0.47	25.18	0.23	1.40
24.0	-1.54	31.38	89.2	0.46	25.24	0.20	1.46
26.0	-1.55	31.42	89.4	0.45	25.26	0.18	1.51
28.0	-1.56	31.45	89.3	0.45	25.29	0.18	1.57
30.0	-1.56	31.49	89.2	0.46	25.32	0.19	1.62
35.0	-1.56	31.55	89.4	0.45	25.37	0.19	1.75
40.0	-1.57	31.67	89.1	0.46	25.47	0.19	1.88
45.0	-1.57	31.77	89.6	0.44	25.55	0.20	2.01
50.0	-1.50	31.99	89.0	0.47	25.73	0.29	2.12
55.0	-1.48	32.22	81.9	0.80	25.92	0.33	2.23
60.0	-1.47	32.31	89.5	0.44	25.99	0.34	2.34
65.0	-1.48	32.39	87.1	0.55	26.05	0.34	2.43
70.0	-1.48	32.43	86.5	0.58	26.08	0.34	2.53
75.0	-1.49	32.50	89.1	0.46	26.14	0.34	2.63
80.0	-1.51	32.55	88.1	0.51	26.18	0.33	2.72
85.0	-1.49	32.59	89.4	0.45	26.22	0.35	2.81
90.0	-1.50	32.64	89.0	0.47	26.25	0.35	2.90
95.0	-1.50	32.68	88.9	0.47	26.29	0.36	2.99
100.0	-1.51	32.74	88.7	0.48	26.33	0.36	3.07
110.0	-1.53	32.82	88.4	0.50	26.40	0.35	3.24
120.0	-1.54	32.91	87.5	0.53	26.47	0.35	3.40
130.0	-1.55	33.00	88.5	0.49	26.55	0.35	3.55
140.0	-1.56	33.08	88.9	0.47	26.61	0.36	3.69
150.0	-1.54	33.22	88.9	0.47	26.72	0.39	3.83
175.0	-1.43	33.52	87.9	0.52	26.97	0.54	4.13
200.0	-0.86	34.11	88.4	0.49	27.43	1.16	4.35
225.0	-0.38	34.49	89.1	0.46	27.71	1.68	4.47
250.0	-0.12	34.64	89.3	0.45	27.82	1.97	4.55
300.0	0.27	34.79	88.7	0.48	27.92	2.39	4.66

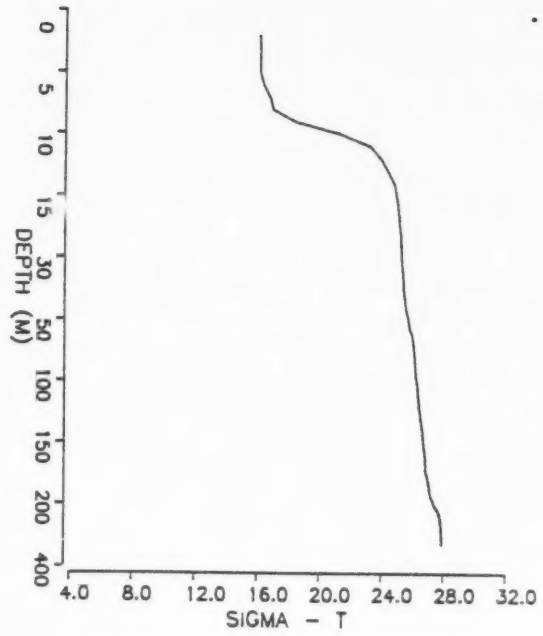


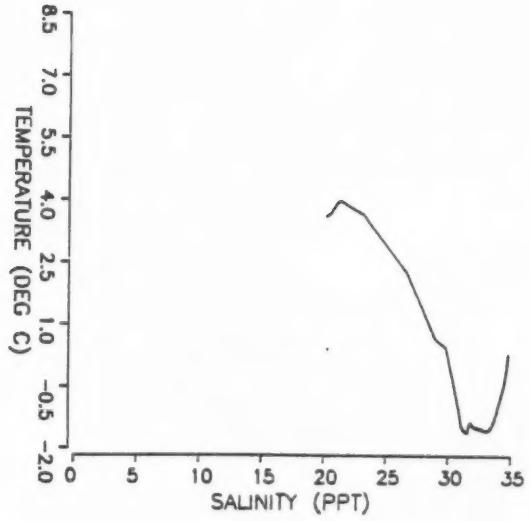
STATION 40 CAST # 5937 DATE : 20:59 GMT ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 6.80 N LONG : 138 43.90 W

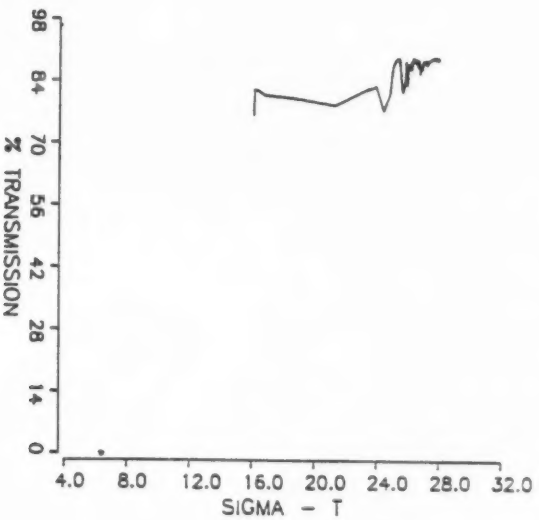
STATION	LAT	LONG	DATE
41	70 11.6 N	138 49.0 W	23:15 GMT ON 14/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	3.65	20.28	76.2	1.09	16.12	4.75	0.23
3.0	3.64	20.29	82.1	0.79	16.13	4.75	0.35
4.0	3.64	20.30	82.3	0.78	16.13	4.75	0.46
5.0	3.64	20.30	82.3	0.78	16.14	4.74	0.58
6.0	3.70	20.57	82.0	0.79	16.35	4.82	0.69
7.0	3.96	21.13	81.1	0.84	16.77	5.11	0.81
8.0	4.02	21.37	80.8	0.85	16.96	5.18	0.91
9.0	3.71	23.16	80.4	0.87	18.40	4.97	1.01
10.0	2.31	26.65	78.8	0.95	21.27	3.77	1.09
12.0	0.49	29.84	83.1	0.74	23.92	2.12	1.19
14.0	-1.01	30.86	81.2	0.83	24.80	0.69	1.27
16.0	-1.43	31.09	87.5	0.53	25.00	0.28	1.33
18.0	-1.47	31.14	88.0	0.51	25.04	0.24	1.39
20.0	-1.51	31.22	88.6	0.48	25.10	0.21	1.44
22.0	-1.53	31.27	88.8	0.48	25.14	0.20	1.50
24.0	-1.55	31.35	89.1	0.46	25.21	0.18	1.56
26.0	-1.55	31.38	89.1	0.46	25.23	0.19	1.61
28.0	-1.56	31.40	89.1	0.46	25.25	0.18	1.67
30.0	-1.57	31.42	89.1	0.46	25.27	0.17	1.72
35.0	-1.58	31.53	89.3	0.45	25.35	0.17	1.86
40.0	-1.55	31.60	89.2	0.46	25.41	0.20	1.99
45.0	-1.37	31.73	84.4	0.68	25.51	0.40	2.11
50.0	-1.42	31.99	83.3	0.73	25.72	0.37	2.23
55.0	-1.44	32.07	84.6	0.67	25.79	0.36	2.34
60.0	-1.47	32.23	83.5	0.72	25.92	0.34	2.45
65.0	-1.49	32.33	87.1	0.55	26.00	0.33	2.55
70.0	-1.49	32.40	87.4	0.54	26.06	0.34	2.65
75.0	-1.49	32.45	87.4	0.54	26.10	0.34	2.75
80.0	-1.50	32.49	88.2	0.50	26.14	0.34	2.84
85.0	-1.50	32.53	87.8	0.52	26.16	0.35	2.94
90.0	-1.50	32.56	87.8	0.52	26.19	0.35	3.03
95.0	-1.50	32.59	88.3	0.50	26.22	0.36	3.12
100.0	-1.49	32.67	89.4	0.45	26.28	0.37	3.21
110.0	-1.51	32.76	88.9	0.47	26.35	0.36	3.38
120.0	-1.53	32.86	88.9	0.47	26.43	0.36	3.54
130.0	-1.55	32.99	88.3	0.50	26.54	0.36	3.70
140.0	-1.55	33.13	88.5	0.49	26.66	0.37	3.84
150.0	-1.52	33.22	86.0	0.60	26.72	0.41	3.98
175.0	-1.45	33.49	88.6	0.48	26.94	0.51	4.28
200.0	-0.86	34.11	89.1	0.46	27.43	1.16	4.51
225.0	-0.39	34.49	89.2	0.46	27.72	1.67	4.63
250.0	-0.07	34.66	89.2	0.46	27.83	2.01	4.70
300.0	0.22	34.77	89.2	0.46	27.91	2.35	4.81
328.0	0.32	34.81	89.3	0.45	27.93	2.46	4.86





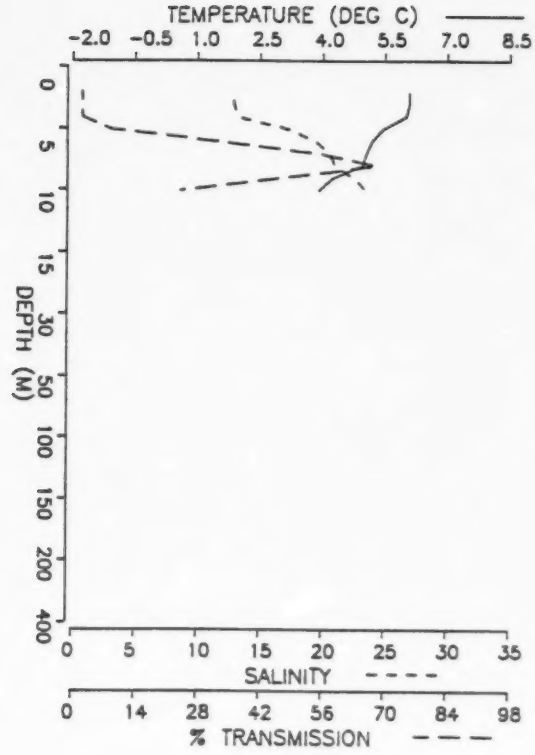


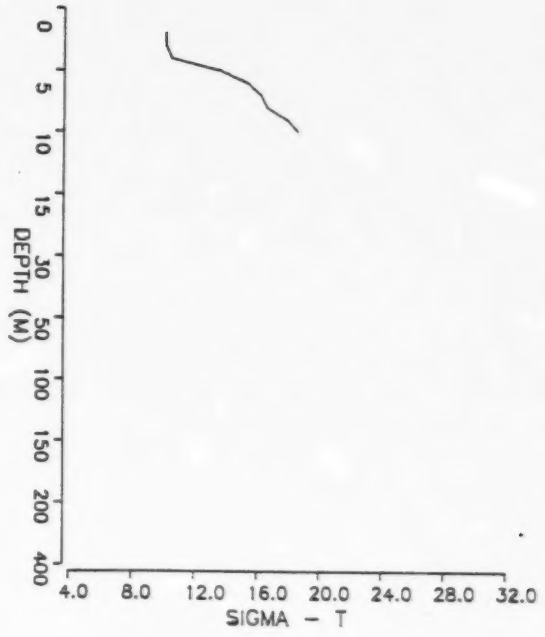


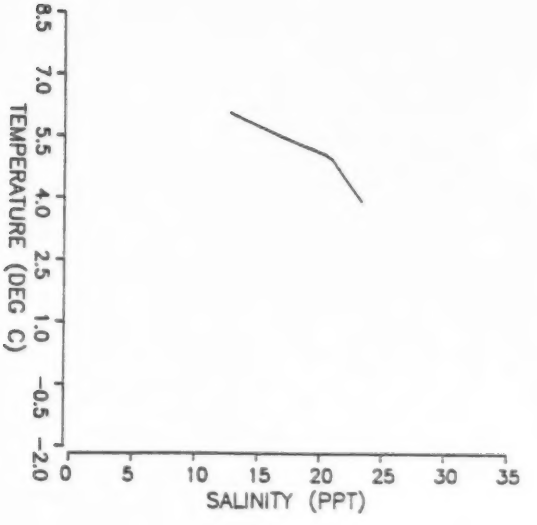
STATION 41 CAST # 5938 DATE : 23:15 ON 14/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 11.60 N LONG : 138 49.00 W

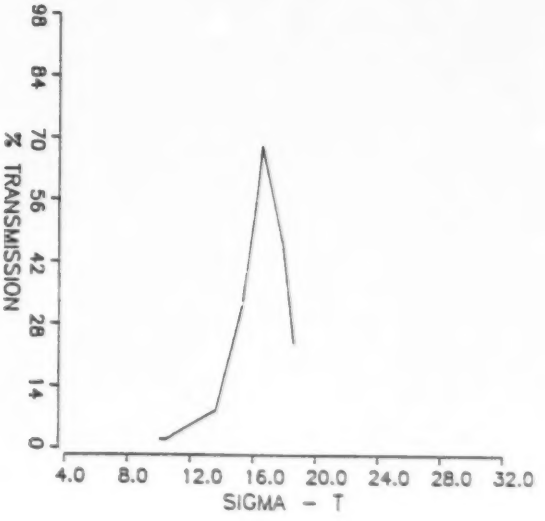
STATION	LAT	LONG	DATE
S-1	69 46.5 N	133 19.7 W	00:40 GMT ON 16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.10	12.90	2.0	15.55	10.13	6.80	0.35
3.0	6.09	12.92	2.1	15.47	10.15	6.79	0.52
4.0	6.02	13.38	2.1	15.53	10.51	6.74	0.70
5.0	5.47	17.34	8.6	9.84	13.67	6.41	0.85
6.0	5.20	19.47	32.3	4.52	15.38	6.26	0.98
7.0	5.07	20.55	55.4	2.36	16.24	6.18	1.10
8.0	4.96	21.05	68.2	1.53	16.64	6.11	1.22
9.0	4.26	22.64	46.4	3.07	17.95	5.49	1.32
10.0	3.92	23.49	23.9	5.73	18.65	5.21	1.42





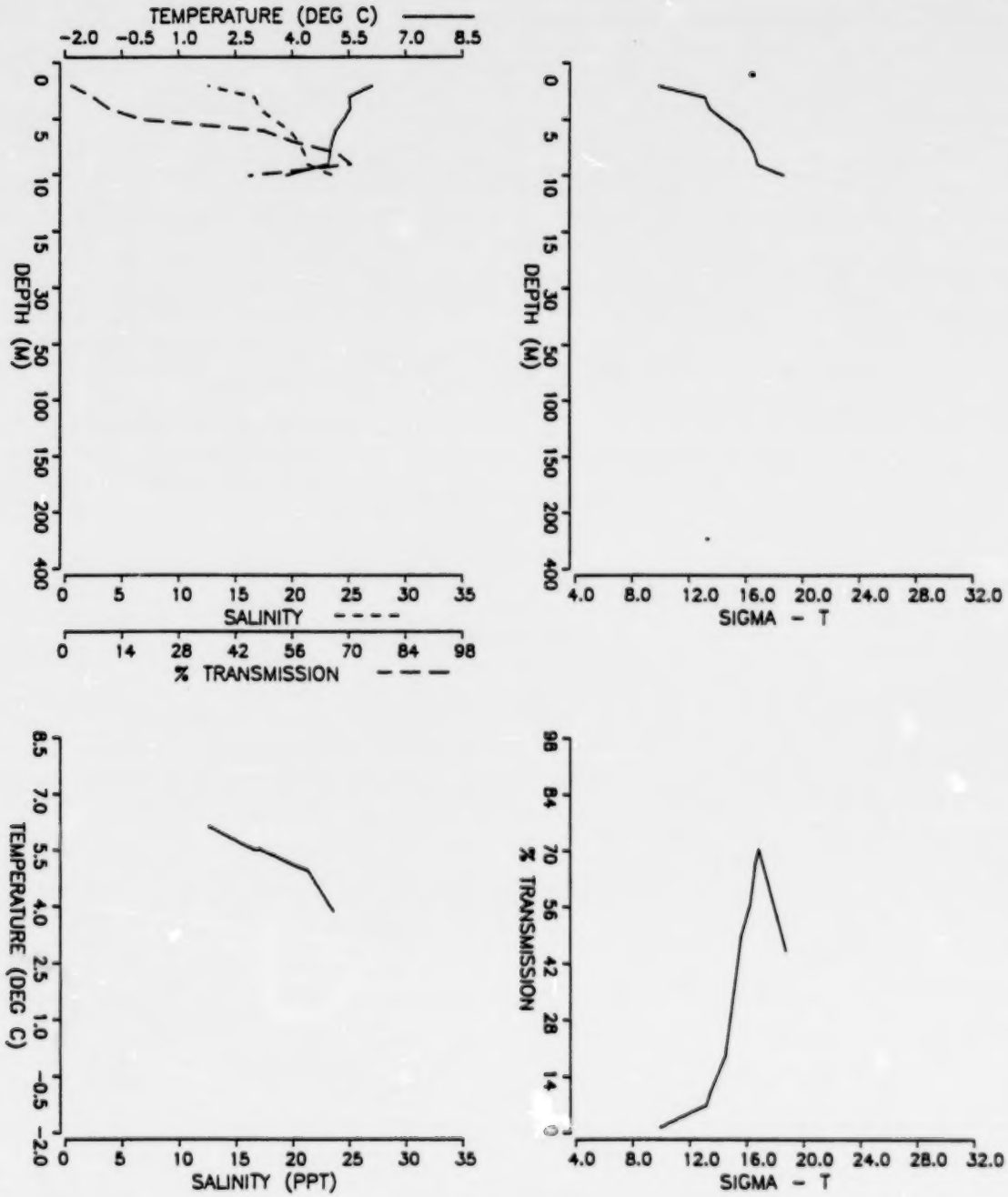




STATION S-1 CAST # 5939 DATE : 00:40 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 46.50 N LONG : 133 19.70 W

STATION	LAT	LONG	DATE
S-2	69 47.0 N	133 20.0 W	00:56 GMT ON 16/09/ 86

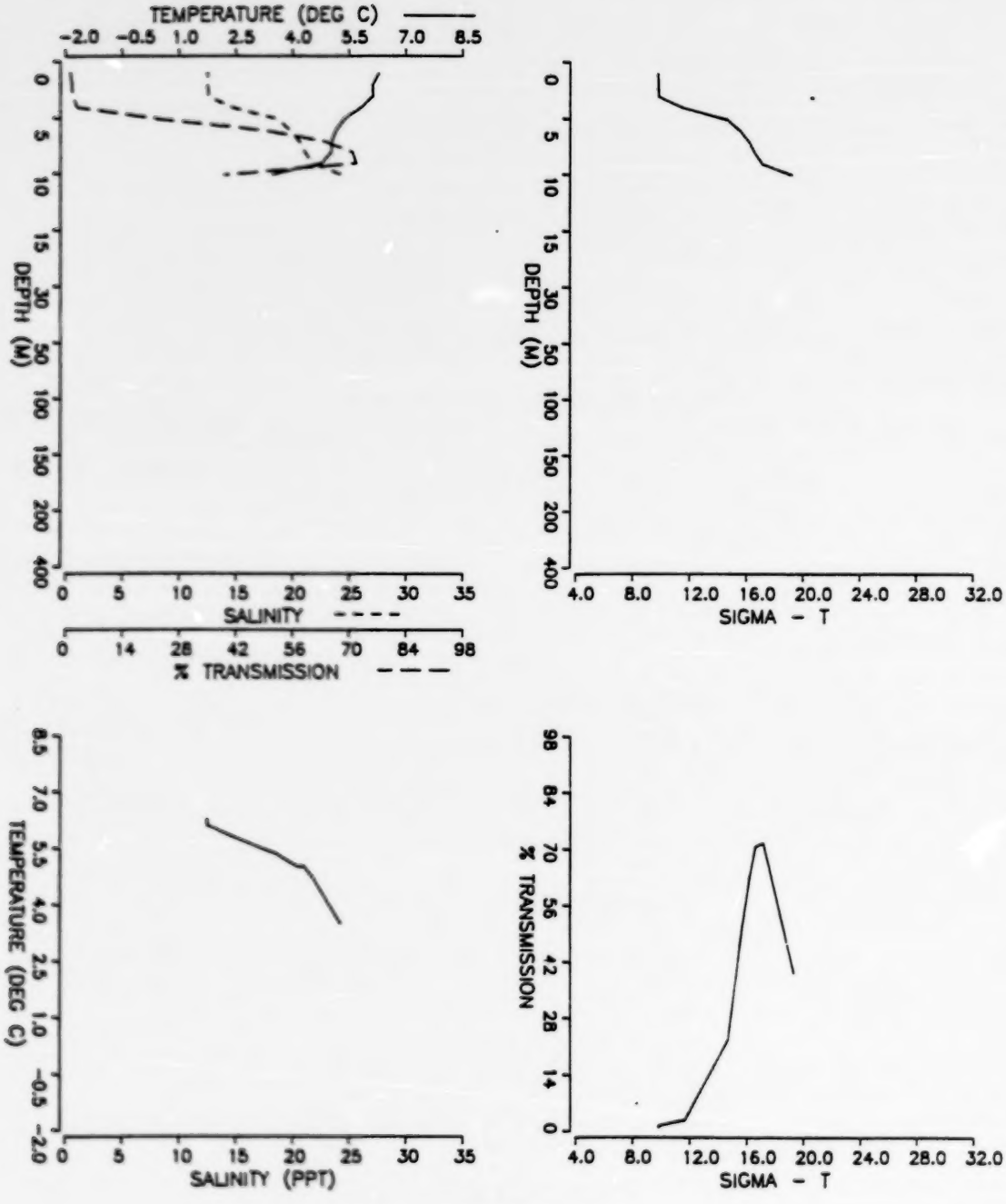
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.16	12.73	1.6	16.57	9.99	6.85	0.35
3.0	5.53	16.73	7.0	10.63	13.19	6.44	0.51
4.0	5.55	17.16	10.7	8.93	13.53	6.48	0.66
5.0	5.38	18.44	19.2	6.60	14.55	6.38	0.79
6.0	5.17	19.84	49.2	2.83	15.67	6.25	0.92
7.0	5.07	20.62	56.6	2.28	16.29	6.19	1.04
8.0	5.02	21.11	67.1	1.59	16.68	6.17	1.15
9.0	4.98	21.41	70.5	1.40	16.92	6.14	1.26
10.0	3.86	23.71	45.1	3.18	18.83	5.15	1.36


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION S-2 CAST # 5940 DATE : 00:56 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 47.00 N LONG : 133 20.00 W

STATION	LAT	LONG	DATE
S-3	69 48.0 N	133 20.1 W	01:06 GMT ON 16/09/ 86

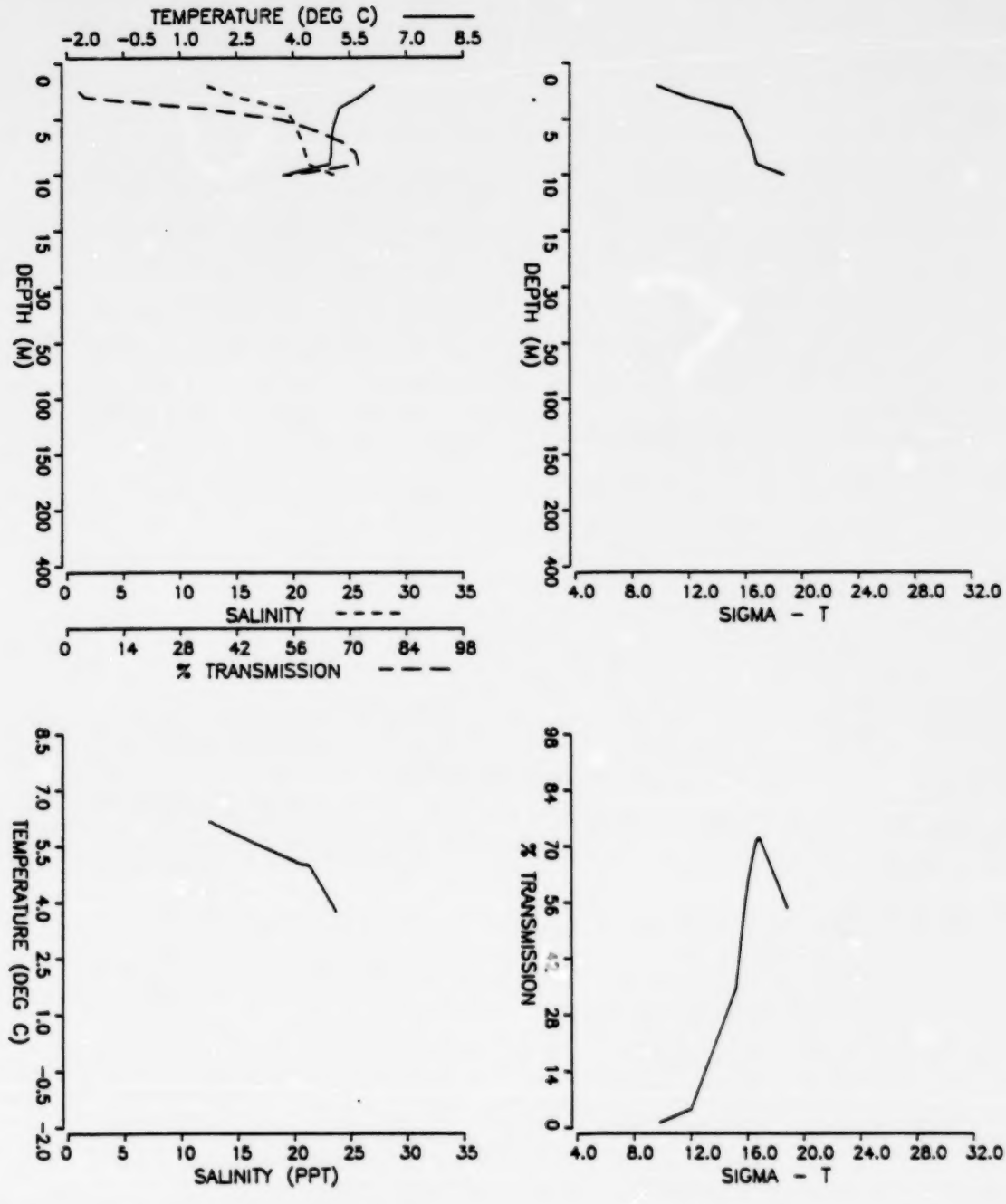
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.30	12.58	1.2	17.63	9.86	6.98	0.18
2.0	6.13	12.58	1.6	16.65	9.88	6.81	0.35
3.0	6.15	12.61	1.6	16.55	9.90	6.83	0.53
4.0	5.85	14.84	3.0	14.06	11.68	6.65	0.70
5.0	5.39	18.66	22.9	5.90	14.72	6.40	0.85
6.0	5.17	19.81	48.6	2.89	15.64	6.25	0.97
7.0	5.04	20.62	63.7	1.80	16.30	6.16	1.09
8.0	5.04	21.11	70.8	1.38	16.68	6.19	1.20
9.0	4.78	21.80	71.7	1.33	17.25	5.96	1.31
10.0	3.50	24.39	39.0	3.76	19.39	4.83	1.40



STATION S-3 CAST # 5941 DATE : 01:06 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 48.00 N LONG : 133 20.10 W

STATION	LAT	LONG	DATE
S-4	69 48.8 N	133 20.4 W	01:18 GMT ON 16/09/ 86

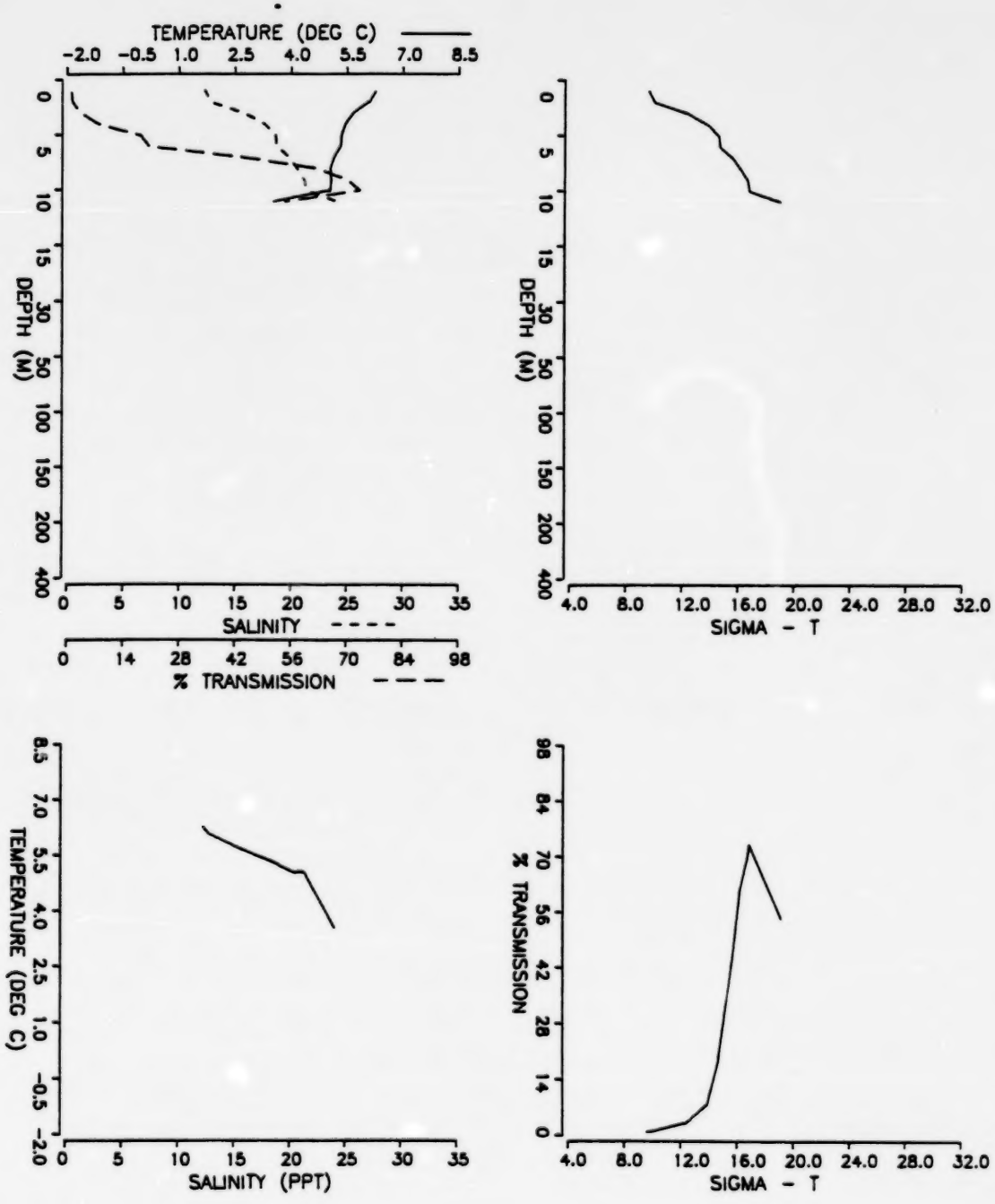
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.19	12.56	1.4	16.97	9.86	6.87	0.36
3.0	5.80	15.30	4.6	12.29	12.04	6.63	0.52
4.0	5.24	19.28	34.6	4.25	15.22	6.29	0.66
5.0	5.14	20.02	53.6	2.50	15.81	6.23	0.78
6.0	5.07	20.44	61.9	1.92	16.15	6.18	0.90
7.0	5.03	20.88	68.3	1.53	16.50	6.17	1.02
8.0	5.04	21.15	71.4	1.34	16.71	6.19	1.13
9.0	4.98	21.41	72.3	1.30	16.93	6.15	1.24
10.0	3.76	23.82	54.5	2.43	18.92	5.07	1.33



STATION S-4 CAST # 5942 DATE : 01:18 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 48.80 N LONG : 133 20.40 W

STATION	LAT	LONG	DATE
S-5	69 49.2 N	133 20.5 W	01:32 GMT ON 16/09/ 86

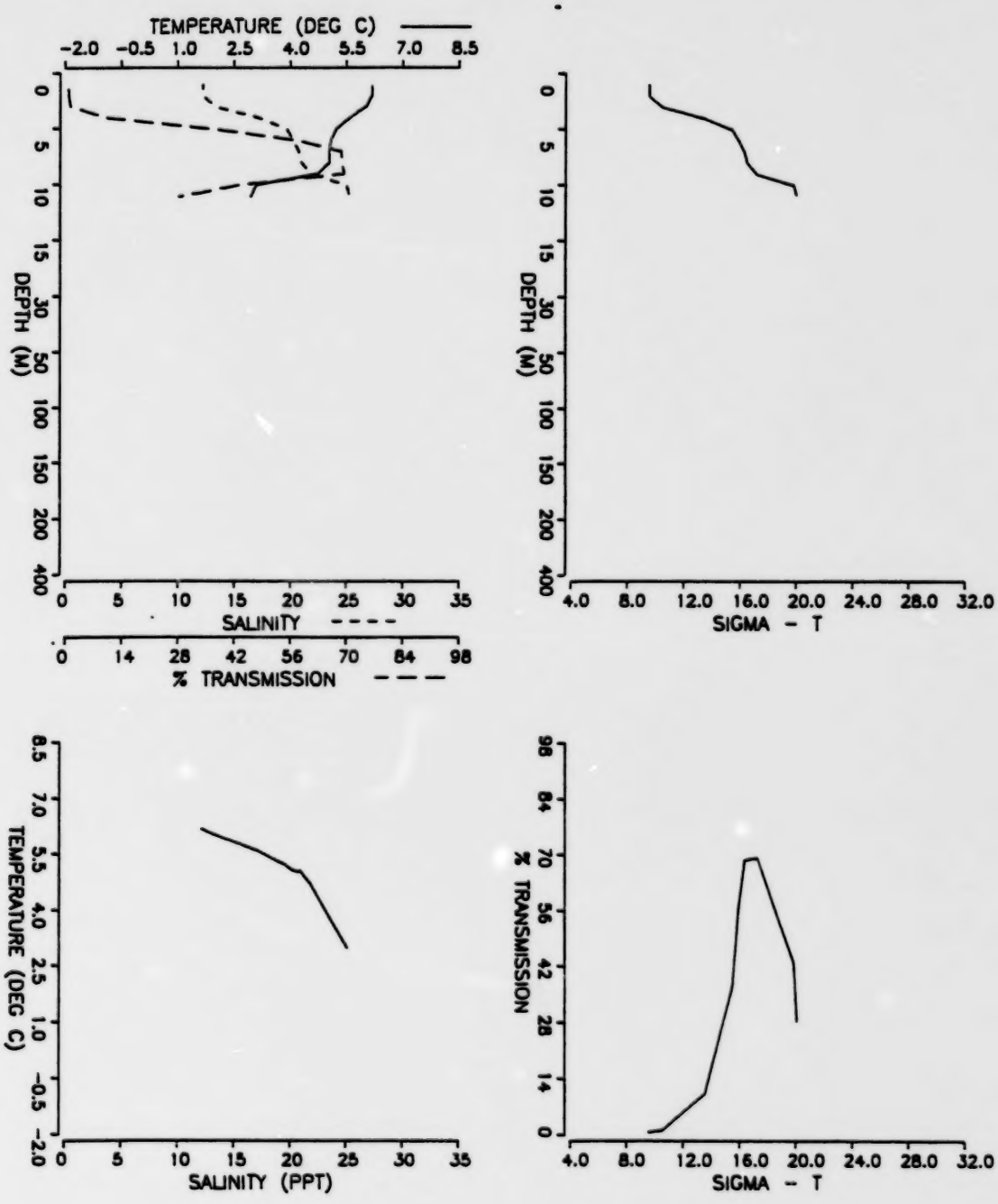
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.29	12.35	1.0	18.37	9.68	6.96	0.18
2.0	6.12	12.85	1.2	17.71	10.09	6.81	0.36
3.0	5.69	15.81	3.3	13.69	12.45	6.55	0.52
4.0	5.47	17.64	7.8	10.19	13.91	6.42	0.66
5.0	5.35	18.64	18.4	6.77	14.71	6.36	0.80
6.0	5.33	18.72	20.5	6.34	14.77	6.35	0.93
7.0	5.16	19.85	44.0	3.28	15.68	6.24	1.05
8.0	5.06	20.55	62.1	1.91	16.24	6.18	1.17
9.0	5.09	21.22	69.8	1.44	16.76	6.24	1.28
10.0	5.06	21.40	73.2	1.25	16.91	6.23	1.39
11.0	3.54	24.17	54.3	2.44	19.21	4.86	1.49


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION S-5 CAST # 5943 DATE : 01:32 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 49.20 N LONG : 133 20.50 W

STATION	LAT	LONG	DATE
S-6	69 49.8 N	133 20.6 W	01:42 GMT ON 16/09/ 86

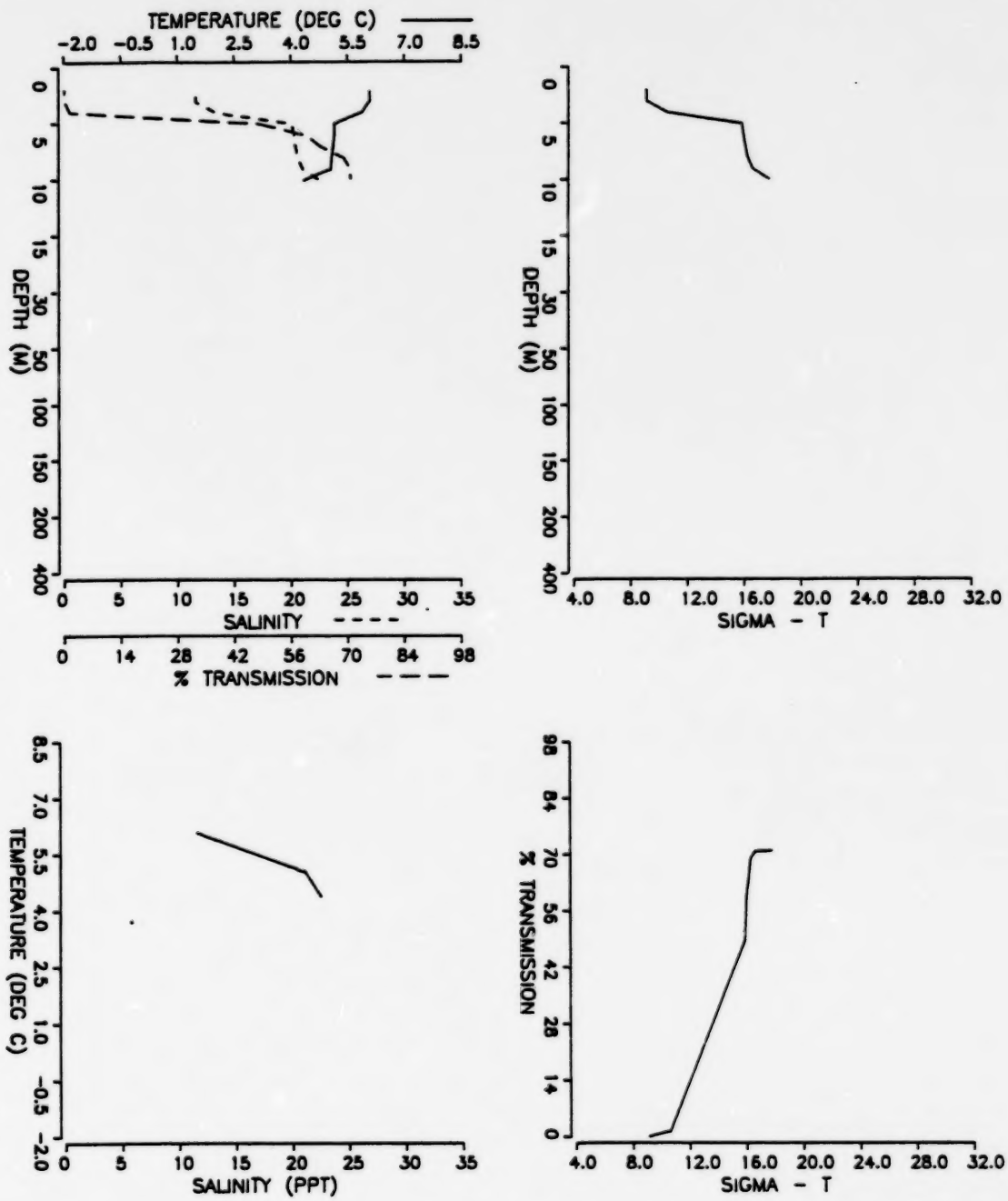
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	6.19	12.27	0.8	19.08	9.62	6.85	0.18
2.0	6.19	12.27	0.8	19.30	9.63	6.86	0.36
3.0	6.04	13.46	1.3	17.48	10.58	6.77	0.53
4.0	5.61	17.24	10.4	9.06	13.58	6.55	0.69
5.0	5.23	19.71	37.3	3.94	15.56	6.30	0.82
6.0	5.09	20.29	57.7	2.20	16.03	6.19	0.94
7.0	5.04	20.79	68.6	1.50	16.43	6.18	1.06
8.0	5.06	21.02	68.8	1.50	16.61	6.20	1.17
9.0	4.74	21.89	69.4	1.46	17.32	5.93	1.28
10.0	3.10	25.02	43.1	3.37	19.92	4.46	1.37
11.0	2.96	25.27	28.1	5.08	20.13	4.34	1.44


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION S-6 CAST # 5944 DATE : 01:42 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 49.80 N LONG : 133 20.60 W

STATION	LAT	LONG	DATE
S-7	69 50.5 N	133 21.0 W	01:55 GMT ON 16/09/ 86

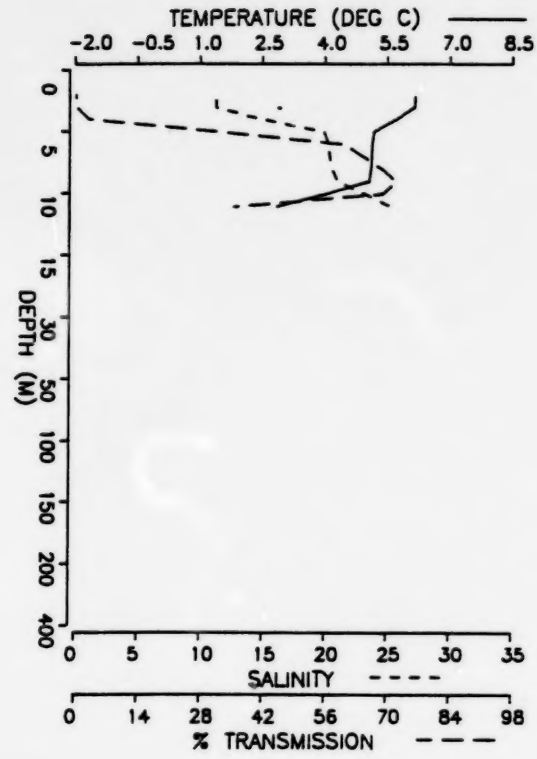
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.10	11.69	0.2	24.14	9.18	6.74	0.37
3.0	6.10	11.69	0.2	24.14	9.18	6.74	0.55
4.0	5.90	13.54	1.5	16.72	10.65	6.64	0.73
5.0	5.17	20.17	48.7	2.87	15.93	6.27	0.87
6.0	5.16	20.33	59.8	2.05	16.06	6.27	0.99
7.0	5.13	20.48	63.7	1.80	16.17	6.25	1.11
8.0	5.09	20.69	69.2	1.47	16.34	6.22	1.22
9.0	5.07	21.13	70.9	1.38	16.70	6.22	1.33
10.0	4.37	22.67	71.0	1.37	17.97	5.61	1.44

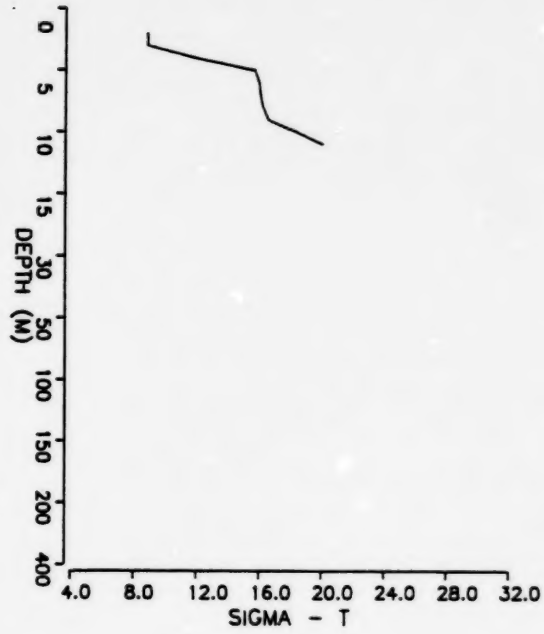


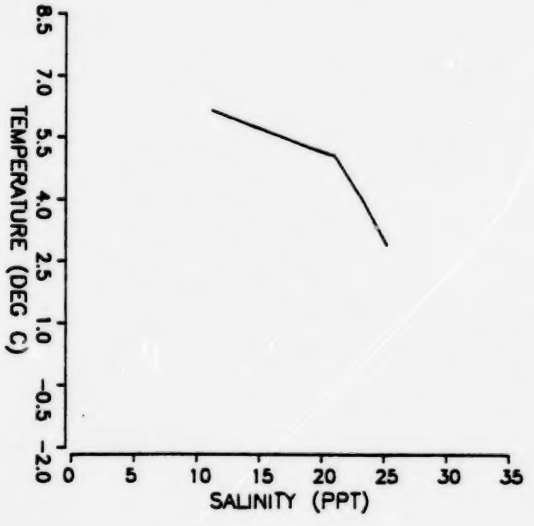
STATION S-7 CAST # 5945 DATE : 01:55 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 50.50 N LONG : 133 21.00 W

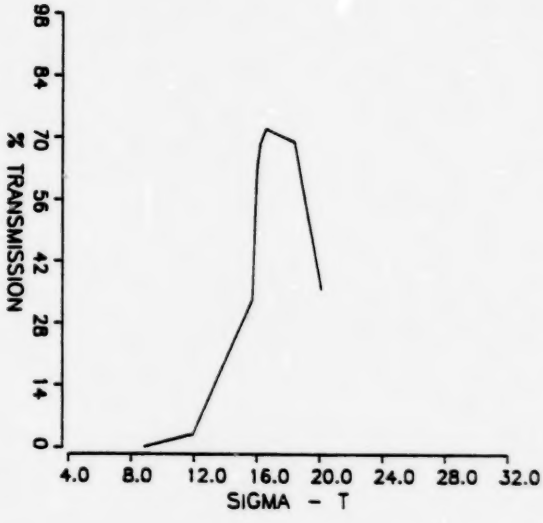
STATION	LAT	LONG	DATE
S-8	69 51.3 N	133 21.1 W	02:05 GMT ON 16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.17	11.33	0.2	24.81	8.89	6.79	0.37
3.0	6.17	11.33	0.2	24.83	8.89	6.78	0.56
4.0	5.73	15.17	3.1	13.93	11.95	6.55	0.73
5.0	5.18	19.97	33.4	4.39	15.77	6.27	0.87
6.0	5.14	20.32	60.5	2.01	16.05	6.25	0.99
7.0	5.13	20.43	64.9	1.73	16.13	6.24	1.11
8.0	5.12	20.63	68.8	1.49	16.30	6.24	1.22
9.0	5.08	21.08	72.0	1.32	16.65	6.23	1.33
10.0	4.05	23.28	69.0	1.48	18.47	5.32	1.43
11.0	2.87	25.35	35.4	4.15	20.20	4.26	1.52





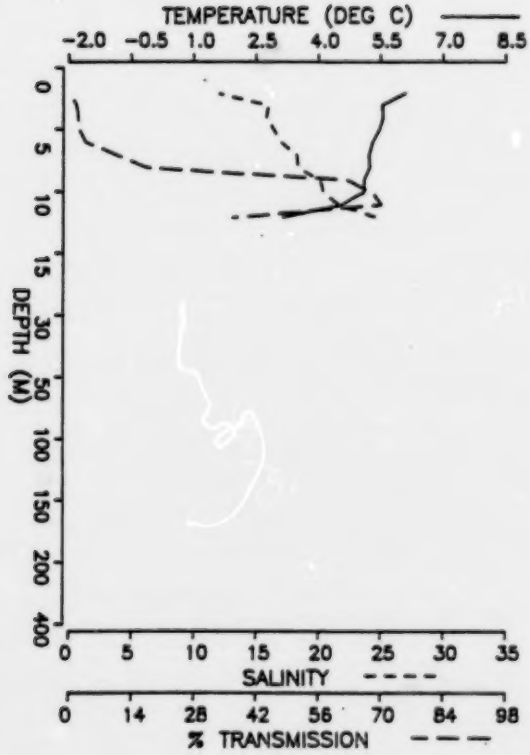


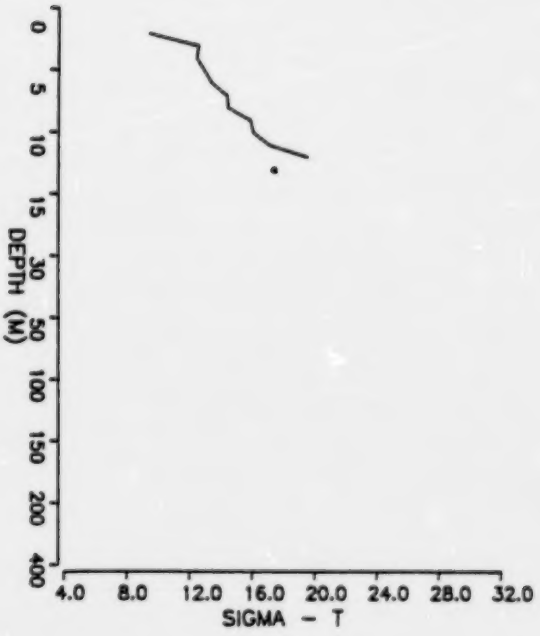


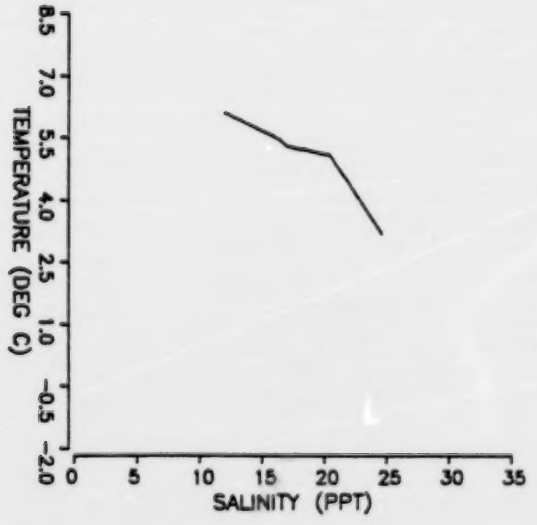
STATION S-8 CAST # 5946 DATE : 02:05 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 51.30 N LONG : 133 21.10 W

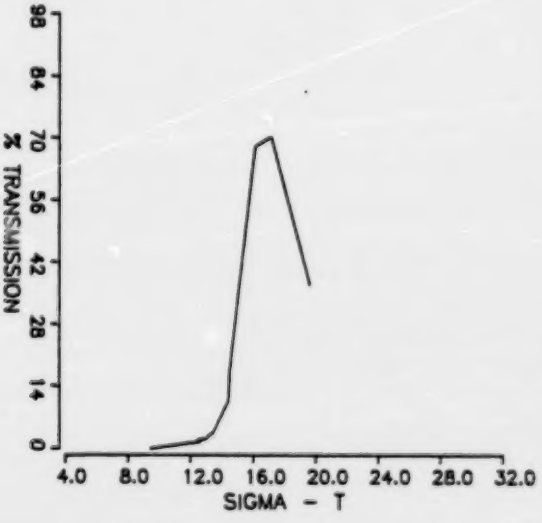
STATION	LAT	LONG	DATE
S-9	69 51.9 N	133 21.2 W	02:15 GMT ON 16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.12	12.11	0.1	28.03	9.50	6.78	0.36
3.0	5.55	16.05	1.6	16.44	12.65	6.42	0.53
4.0	5.58	15.89	2.1	15.54	12.52	6.44	0.68
5.0	5.48	16.49	2.3	15.14	13.00	6.37	0.83
6.0	5.32	17.09	3.6	13.26	13.49	6.25	0.97
7.0	5.23	18.33	10.8	8.92	14.47	6.23	1.11
8.0	5.25	18.42	17.5	6.97	14.54	6.25	1.24
9.0	5.12	20.22	62.6	1.87	15.97	6.22	1.36
10.0	5.11	20.47	68.1	1.54	16.17	6.22	1.48
12.0	3.18	24.74	36.7	4.01	19.69	4.53	1.68





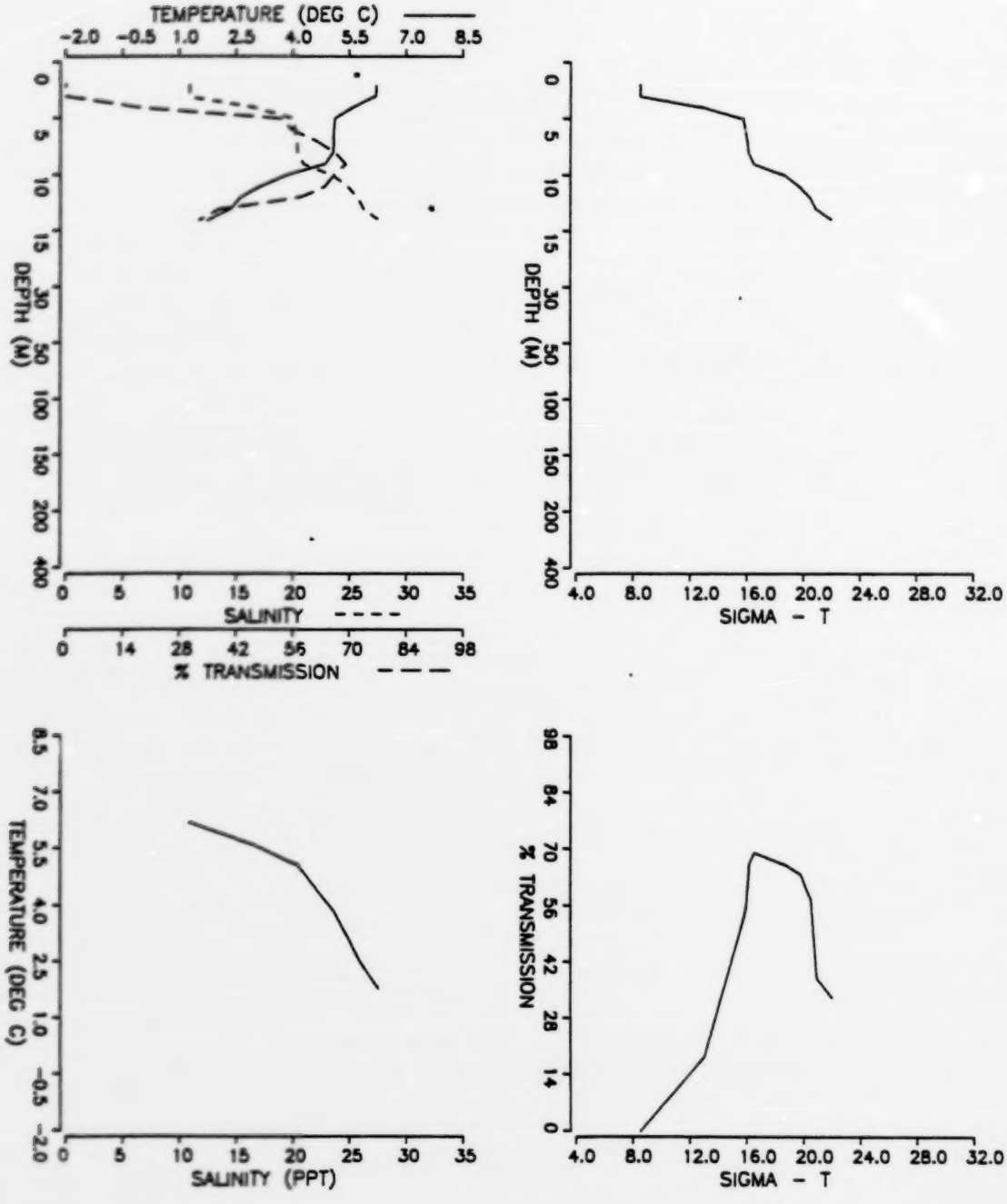




STATION S-9 CAST # 5947 DATE : 02:15 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 51.90 N LONG : 133 21.20 W

STATION	LAT	LONG	DATE
S-10	69 52.6 N	133 21.4 W	02:26 GMT ON 16/09/ 86

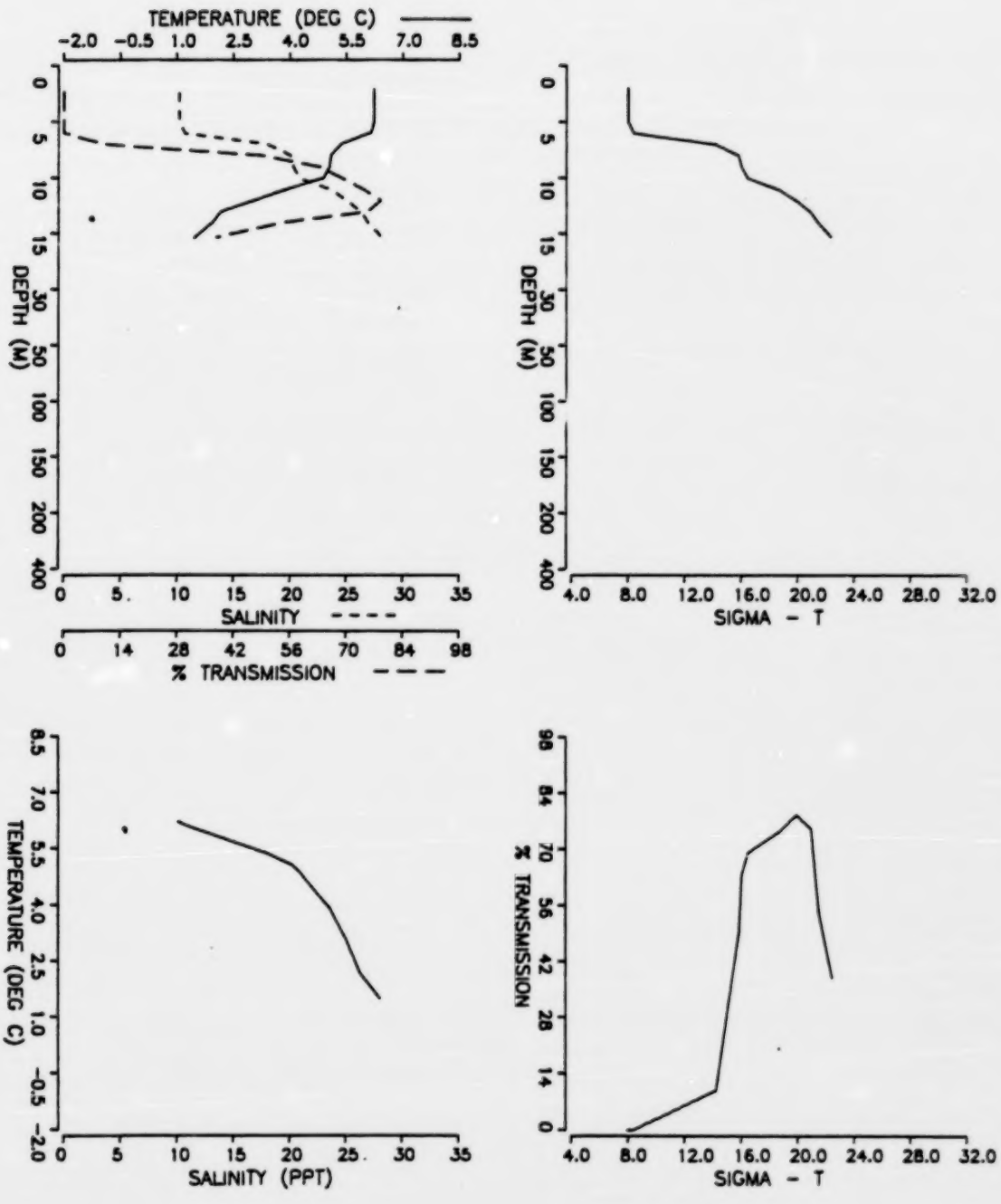
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.22	10.95	0.0	30.91	8.59	6.81	0.38
3.0	6.22	10.95	0.0	30.91	8.59	6.81	0.57
4.0	5.61	16.57	18.4	6.78	13.06	6.51	0.74
5.0	5.13	20.06	53.3	2.52	15.84	6.22	0.87
6.0	5.10	20.22	55.8	2.33	15.97	6.20	0.99
7.0	5.09	20.41	62.0	1.91	16.13	6.21	1.11
8.0	5.09	20.50	66.4	1.64	16.19	6.20	1.22
9.0	4.88	21.02	69.1	1.48	16.62	6.02	1.33
10.0	3.87	23.65	66.2	1.65	18.78	5.16	1.43
12.0	2.63	25.79	57.6	2.21	20.56	4.04	1.60
14.0	1.77	27.67	32.9	4.45	22.12	3.28	1.73



STATION S-10 CAST # 5948 DATE : 02:26 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 52.60 N LONG : 133 21.40 W

STATION	LAT	LONG	DATE
S-11	69 53.3 N	133 21.6 W	02:36 GMT ON 16/09/ 86

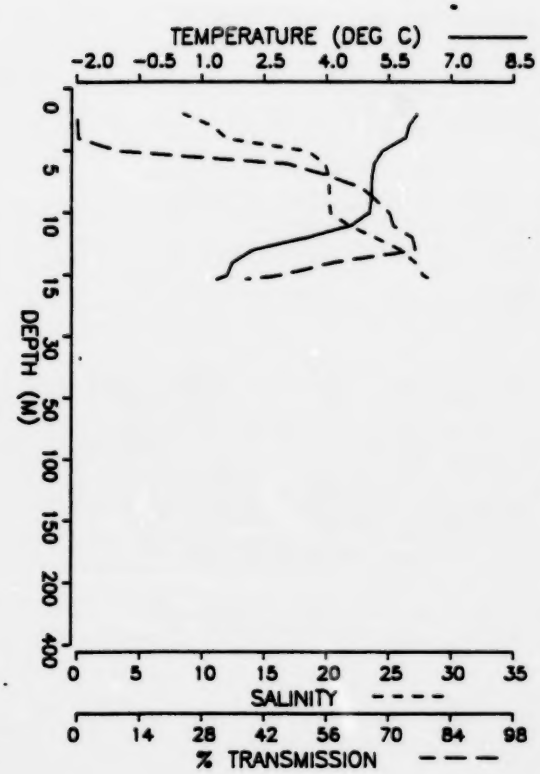
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.25	10.25	0.0	30.91	8.03	6.80	0.39
3.0	6.25	10.25	0.0	30.91	8.03	6.80	0.59
4.0	6.25	10.24	0.0	30.91	8.03	6.80	0.78
5.0	6.24	10.26	0.0	30.91	8.05	6.80	0.98
6.0	6.17	10.77	0.1	29.80	8.45	6.76	1.17
7.0	5.39	18.08	9.9	9.25	14.26	6.37	1.33
8.0	5.11	20.14	49.4	2.82	15.91	6.21	1.46
9.0	5.07	20.39	63.8	1.80	16.11	6.18	1.58
10.0	4.91	20.94	69.1	1.48	16.56	6.05	1.69
12.0	3.07	25.12	78.6	0.96	20.00	4.45	1.88
14.0	1.95	27.00	54.0	2.47	21.57	3.43	2.02
16.0	1.48	28.16	37.6	3.91	22.53	3.03	2.13

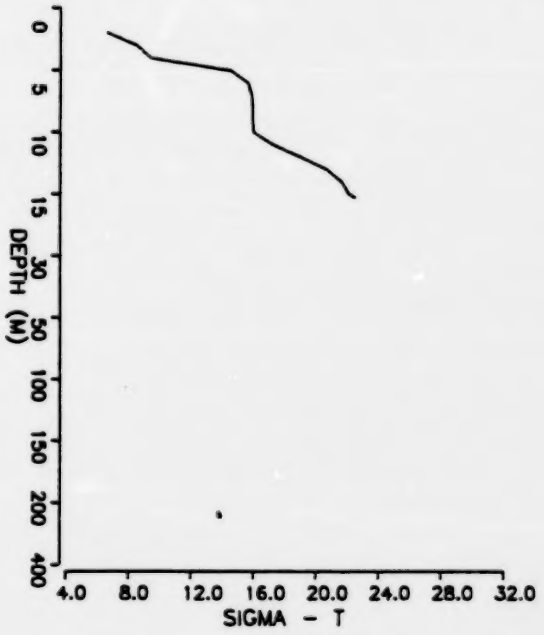


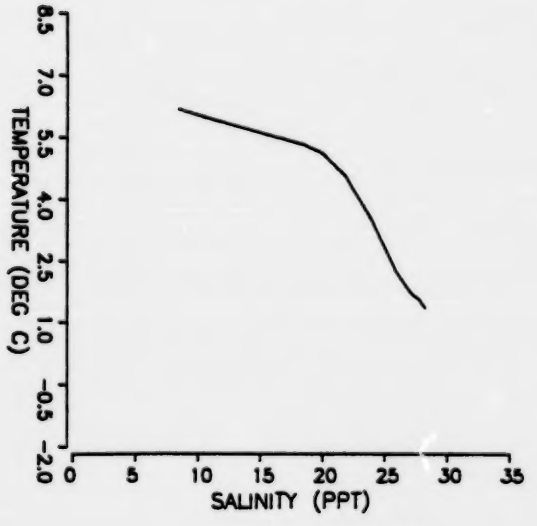
STATION S-11 CAST # 5949 DATE : 02:36 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 53.30 N LONG : 133 21.60 W

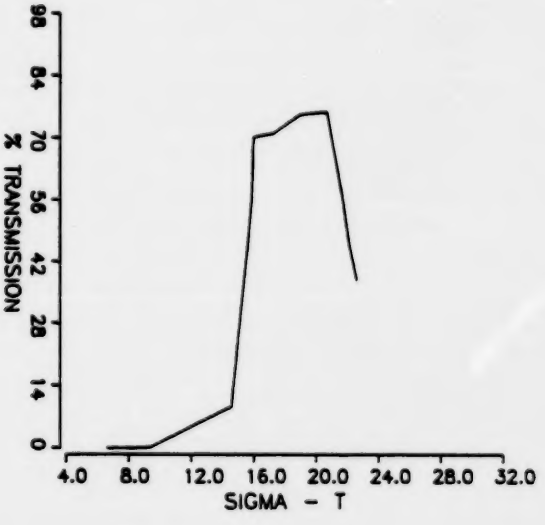
STATION	LAT	LONG	DATE
S-12	69 54.2 N	133 21.8 W	02:50 GMT ON 16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.20	8.55	0.0	30.91	6.70	6.67	0.42
3.0	6.00	10.87	0.1	29.56	8.54	6.59	0.62
4.0	5.90	12.01	0.2	24.70	9.44	6.55	0.80
5.0	5.35	18.51	9.4	9.46	14.60	6.36	0.96
6.0	5.16	19.89	47.3	2.99	15.71	6.24	1.09
7.0	5.10	20.18	56.7	2.27	15.94	6.20	1.20
8.0	5.09	20.24	63.9	1.79	15.99	6.19	1.32
9.0	5.09	20.27	67.4	1.58	16.01	6.19	1.44
10.0	5.04	20.34	70.2	1.42	16.08	6.15	1.56
12.0	3.55	23.96	75.2	1.14	19.05	4.86	1.76
14.0	1.74	27.17	57.4	2.22	21.72	3.23	1.91
16.0	1.36	28.35	37.7	3.91	22.69	2.92	2.02





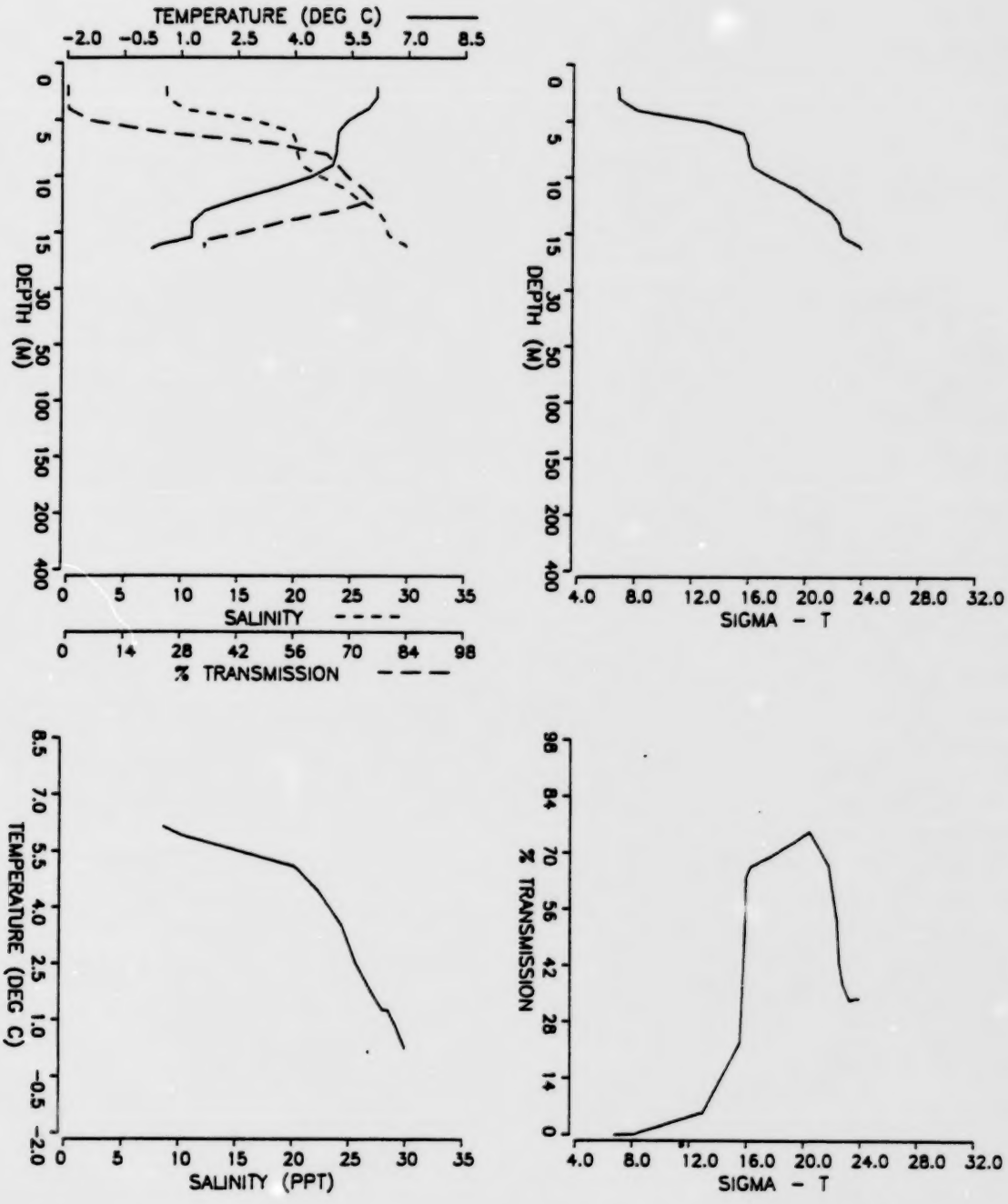




STATION S-12 CAST # 5950 DATE : 02:50 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 54.20 N LONG : 133 21.80 W

STATION	LAT	LONG	DATE
S-13	69 54.9 N	133 21.9 W	03:01 GMT ON 16/09/ 86

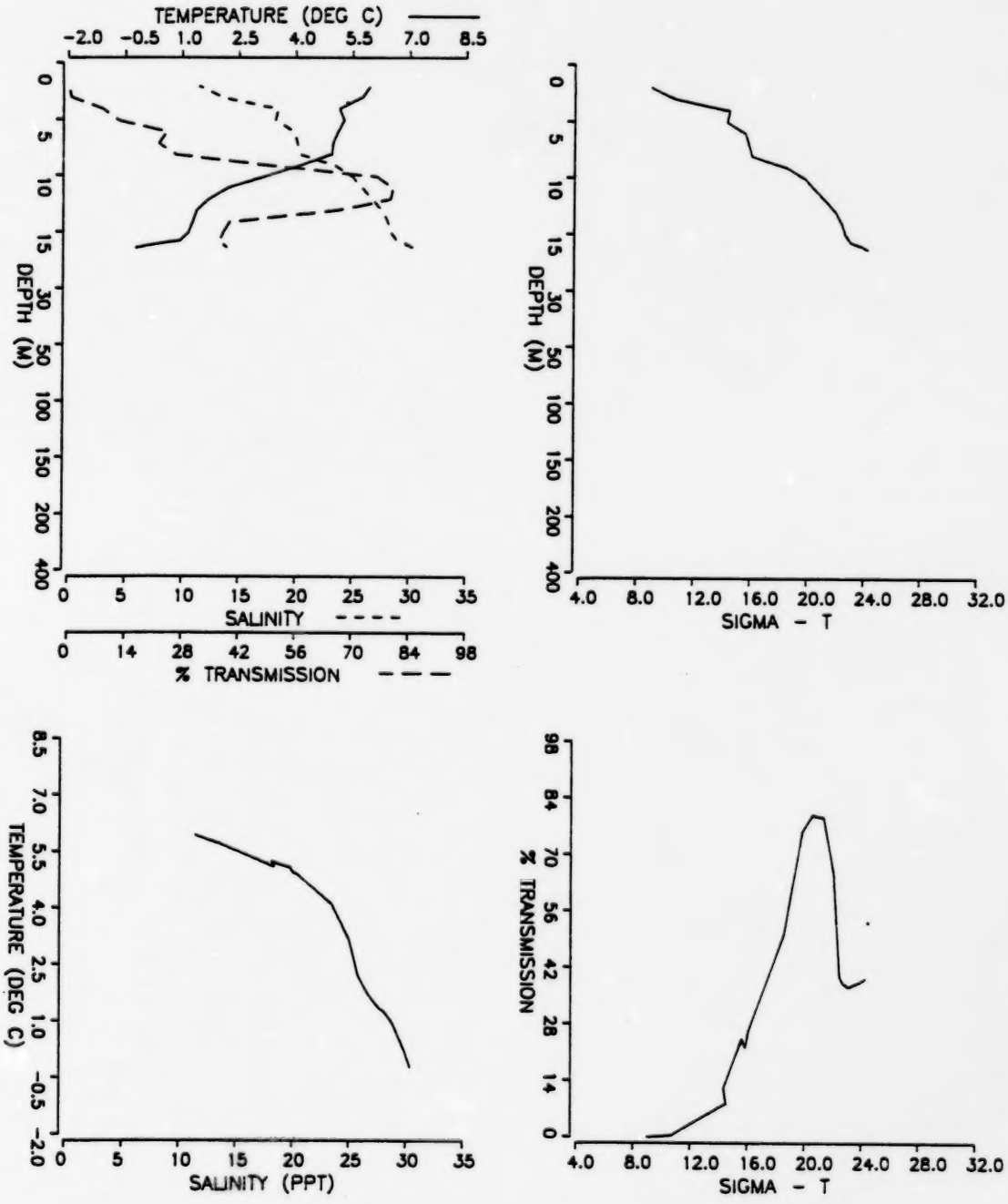
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	6.18	8.70	0.0	30.91	6.82	6.65	0.42
3.0	6.18	8.73	0.0	30.91	6.84	6.65	0.62
4.0	5.95	10.35	0.2	25.21	8.13	6.51	0.82
5.0	5.43	16.50	5.6	11.55	13.01	6.33	0.99
6.0	5.16	19.78	22.9	5.90	15.62	6.23	1.13
7.0	5.12	20.19	50.8	2.71	15.95	6.22	1.25
8.0	5.10	20.27	64.0	1.79	16.01	6.21	1.36
9.0	5.00	20.67	66.6	1.62	16.33	6.13	1.48
10.0	4.47	22.33	69.1	1.48	17.69	5.68	1.59
12.0	2.53	25.66	75.3	1.13	20.47	3.94	1.76
14.0	1.29	28.02	53.2	2.53	22.42	2.83	1.88
16.0	1.28	28.50	37.5	3.92	22.81	2.84	1.99
18.0	0.45	29.73	34.0	4.32	23.84	2.08	2.08
19.0	0.24	29.99	33.8	4.34	24.05	1.89	2.12



STATION S-13 CAST # 5951 DATE : 03:01 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 54.90 N LONG : 133 21.90 W

STATION	LAT	LONG	DATE
S-14	69 55.6 N	133 22.0 W	03:13 GMT ON 16/09/ 86

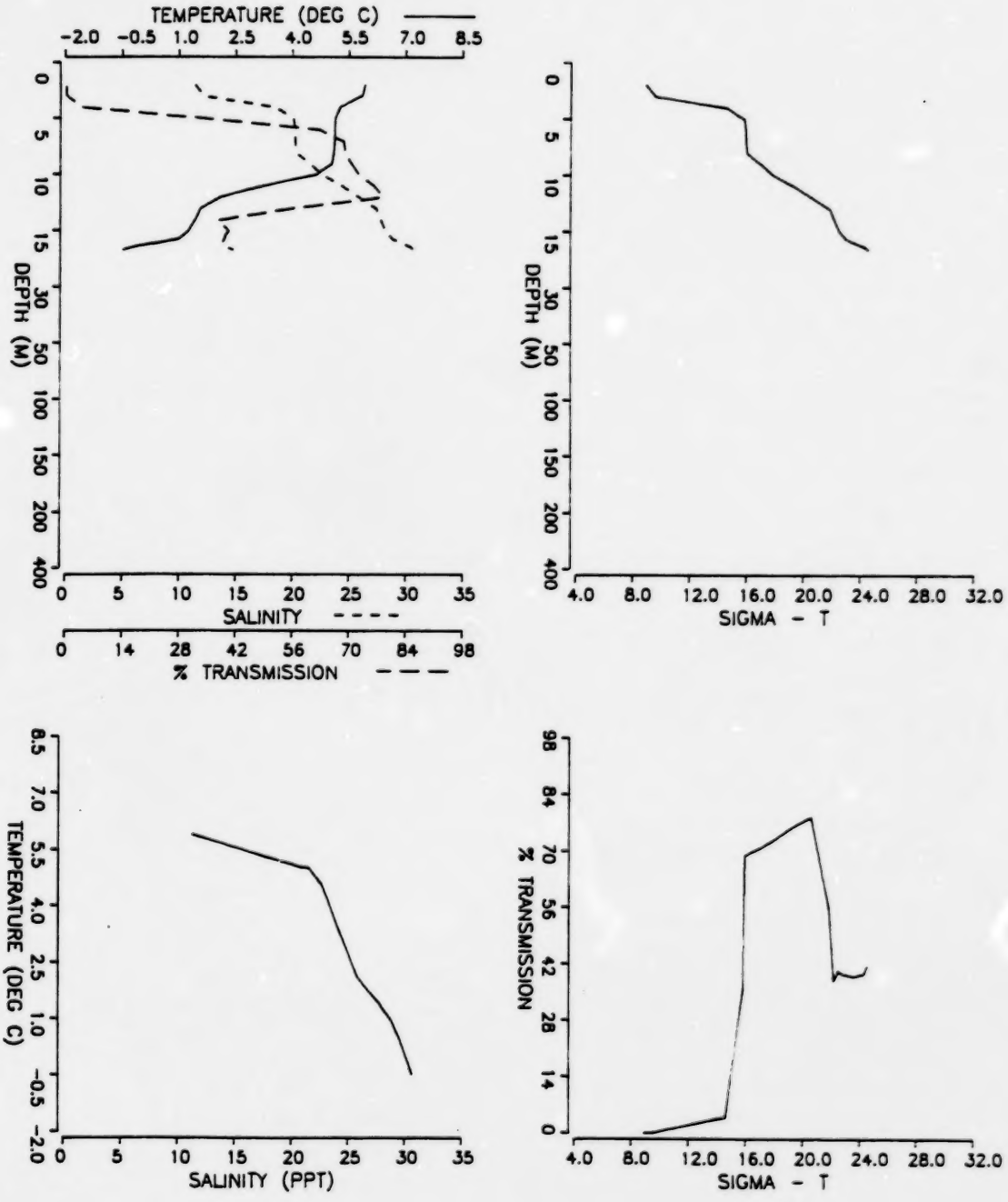
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.97	11.51	0.1	26.97	9.04	6.59	0.37
3.0	5.76	13.63	0.5	20.84	10.73	6.50	0.55
4.0	5.15	18.46	8.3	9.95	14.58	6.15	0.70
5.0	5.28	18.25	12.3	8.38	14.40	6.27	0.83
6.0	5.12	19.87	24.4	5.65	15.69	6.20	0.96
7.0	4.98	20.16	22.2	6.01	15.94	6.08	1.08
8.0	4.96	20.45	26.5	5.31	16.16	6.07	1.19
9.0	4.14	23.50	50.2	2.76	18.64	5.42	1.30
10.0	3.22	25.01	75.9	1.10	19.91	4.59	1.38
12.0	1.72	26.76	79.3	0.93	21.39	3.19	1.52
14.0	1.28	28.15	39.8	3.68	22.53	2.83	1.64
16.0	1.05	28.71	37.8	3.89	22.99	2.63	1.74
18.0	0.29	29.83	38.3	3.83	23.92	1.93	1.84
19.0	-0.22	30.45	39.4	3.73	24.44	1.46	1.87



STATION S-14 CAST # 5952 DATE : 03:13 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 55.60 N LONG : 133 22.00 W

STATION	LAT	LONG	DATE
S-15	69 56.4 N	133 22.4 W	03:25 GMT ON 16/09/ 86

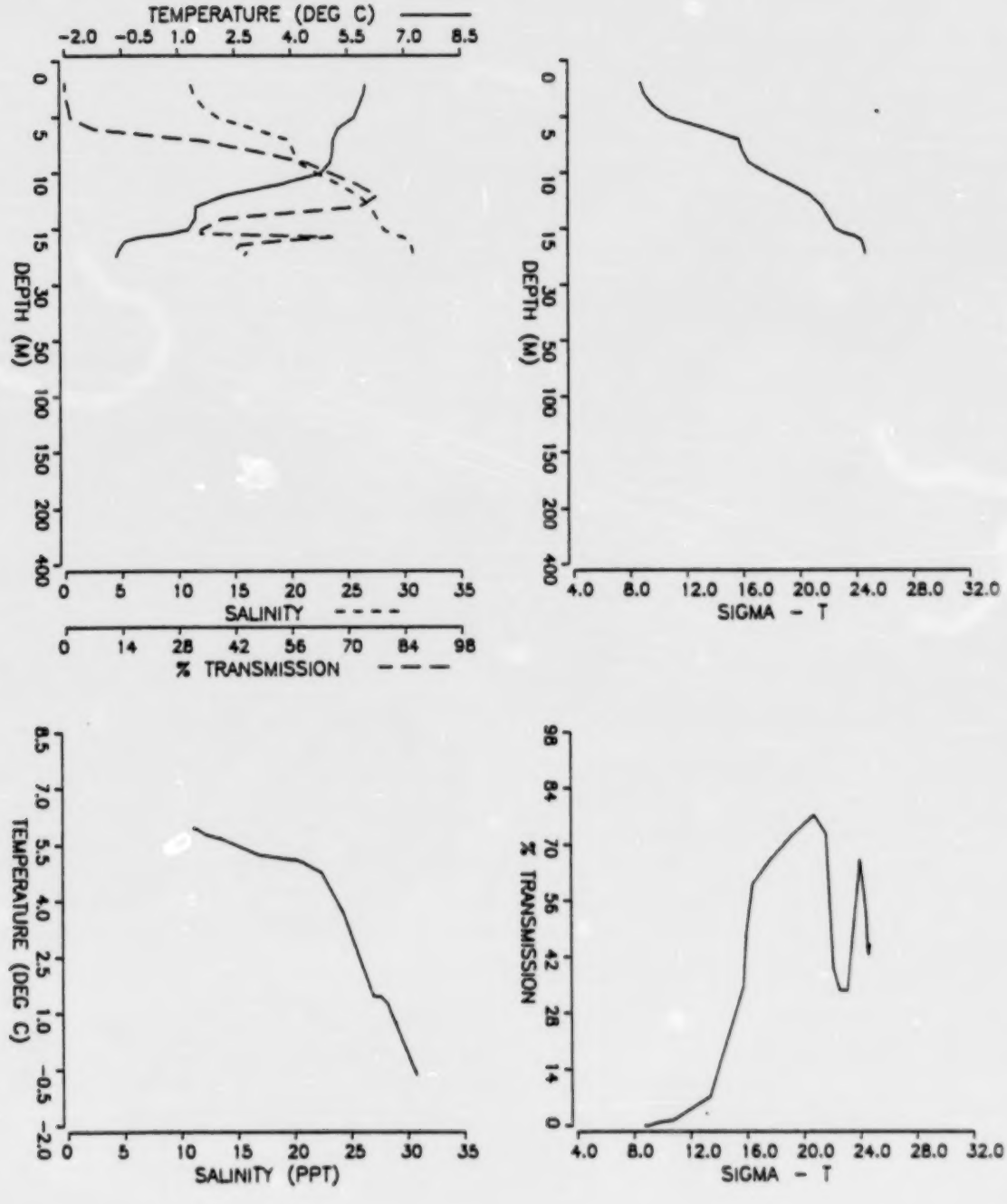
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.93	11.41	0.2	25.47	8.97	6.55	0.37
3.0	5.85	12.21	0.2	24.14	9.60	6.51	0.56
4.0	5.27	18.55	3.9	12.97	14.64	6.28	0.71
5.0	5.14	20.11	35.8	4.10	15.88	6.23	0.84
6.0	5.13	20.23	62.8	1.86	15.98	6.23	0.95
7.0	5.12	20.26	68.7	1.50	16.01	6.22	1.07
8.0	5.10	20.38	69.0	1.48	16.10	6.21	1.19
9.0	5.04	21.62	70.7	1.39	17.09	6.22	1.30
10.0	4.62	22.69	72.5	1.29	17.96	5.86	1.40
12.0	2.12	25.88	78.3	0.98	20.67	3.54	1.57
14.0	1.43	27.82	37.8	3.89	22.25	2.96	1.69
16.0	1.13	28.53	39.6	3.71	22.84	2.70	1.80
18.0	0.49	29.57	38.8	3.78	23.71	2.11	1.89
20.0	-0.47	30.70	41.6	3.51	24.66	1.22	1.97



STATION S-15 CAST # 5953 DATE : 03:25 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 56.40 N LONG : 133 22.40 W

STATION	LAT	LONG	DATE
S-16	69 56.9 N	133 22.8 W	03:39 GMT ON 16/09/ 86

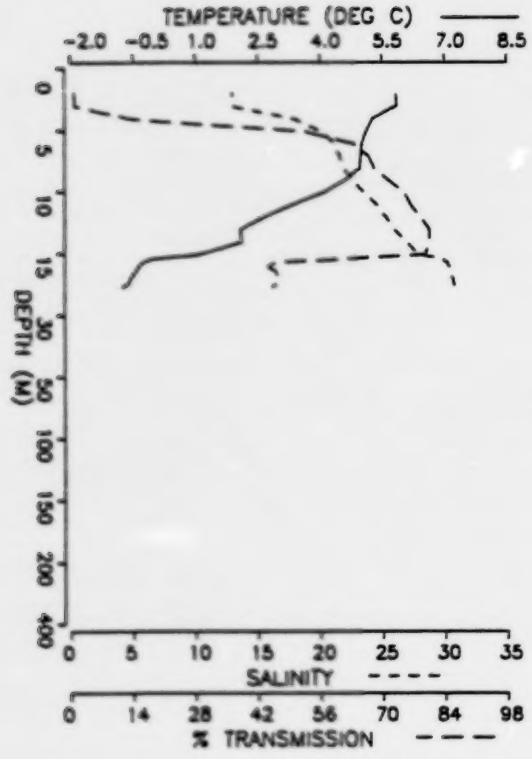
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.99	11.18	0.0	30.91	8.78	6.60	0.38
3.0	5.94	11.52	0.1	28.83	9.05	6.57	0.56
4.0	5.82	12.31	0.8	19.07	9.68	6.49	0.75
5.0	5.69	13.69	1.4	17.02	10.78	6.44	0.92
6.0	5.27	16.97	7.2	10.51	13.39	6.19	1.08
7.0	5.13	20.00	34.5	4.26	15.80	6.22	1.21
8.0	5.13	20.29	48.2	2.92	16.02	6.23	1.32
9.0	5.06	20.84	60.3	2.03	16.47	6.20	1.44
10.0	4.80	22.45	66.4	1.64	17.76	6.02	1.54
12.0	2.27	26.07	77.4	1.02	20.81	3.69	1.71
14.0	1.47	27.69	39.2	3.75	22.15	2.99	1.84
16.0	0.81	28.88	33.7	4.35	23.14	2.40	1.95
18.0	-0.39	30.47	52.9	2.55	24.47	1.29	2.03
20.0	-0.53	30.69	42.7	3.40	24.64	1.16	2.09
22.0	-0.63	30.81	44.4	3.24	24.75	1.07	2.16

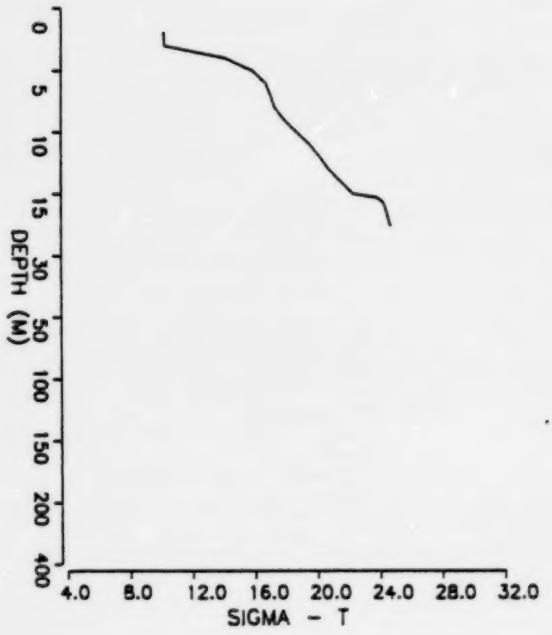


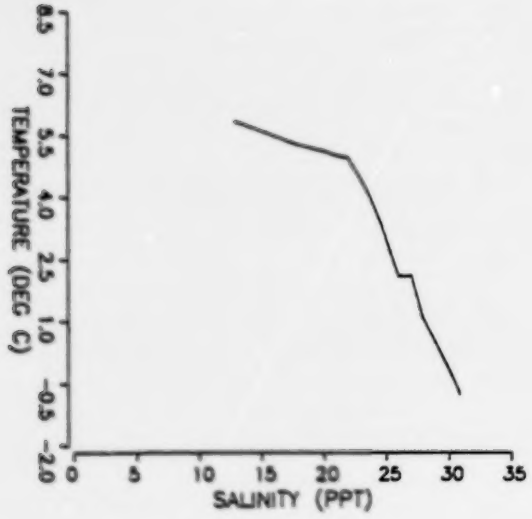
STATION S-16 CAST # 5954 DATE : 03:39 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 56.90 N LONG : 133 22.80 W

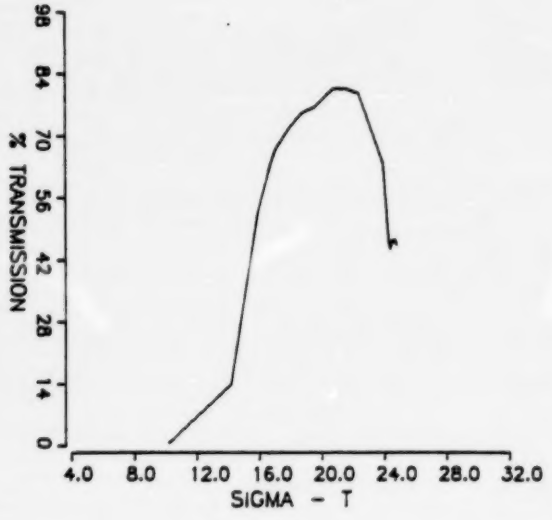
STATION	LAT	LONG		DATE
S-17	69 57.4 N	133 23.0 W	03:51 GMT ON	16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.85	13.01	0.8	19.20	10.23	6.55	0.35
3.0	5.86	13.08	0.9	18.91	10.29	6.57	0.52
4.0	5.30	18.03	14.0	7.87	14.23	6.28	0.68
5.0	5.14	20.19	52.7	2.56	15.95	6.24	0.80
6.0	5.03	21.25	63.8	1.80	16.79	6.19	0.91
7.0	5.00	21.64	67.1	1.60	17.11	6.18	1.02
8.0	4.99	21.98	68.5	1.51	17.37	6.19	1.13
9.0	4.61	22.74	71.9	1.32	18.01	5.85	1.23
10.0	4.11	23.65	75.2	1.14	18.76	5.40	1.32
12.0	2.69	25.38	78.7	0.96	20.24	4.08	1.49
14.0	2.14	27.05	80.7	0.86	21.60	3.62	1.63
16.0	-0.02	29.85	64.0	1.79	23.95	1.62	1.73
18.0	-0.36	30.41	44.6	3.23	24.42	1.32	1.81
20.0	-0.49	30.60	46.6	3.06	24.58	1.20	1.88
22.0	-0.60	30.75	46.7	3.05	24.70	1.10	1.94
23.0	-0.74	30.92	45.3	3.17	24.84	0.96	1.97





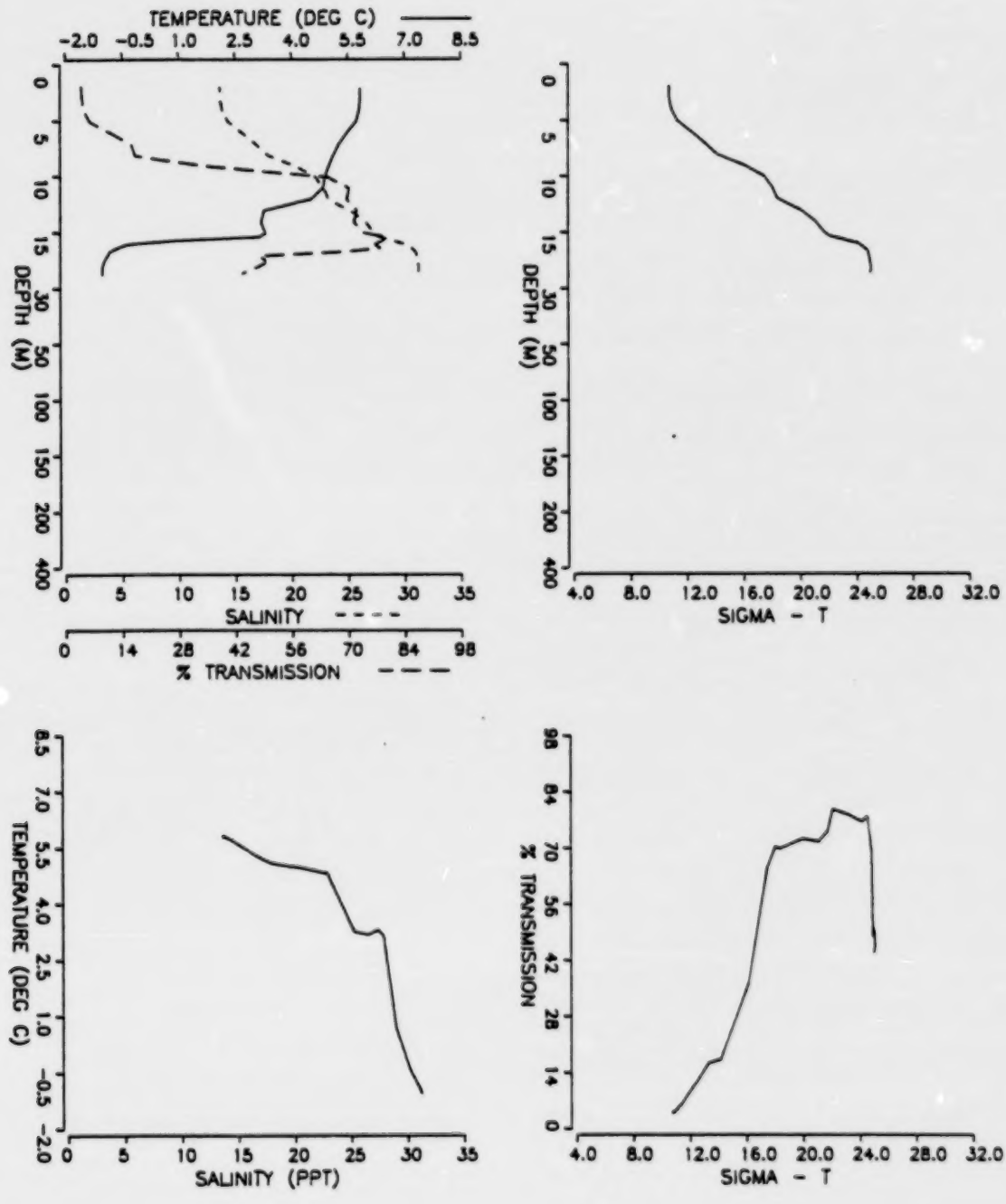




STATION S-17 CAST # 5955 DATE : 03:51 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 57.40 N LONG : 133 23.00 W

STATION	LAT	LONG	DATE
S-18	69 58.5 N	133 23.5 W	04:08 GMT ON 16/09/ 86

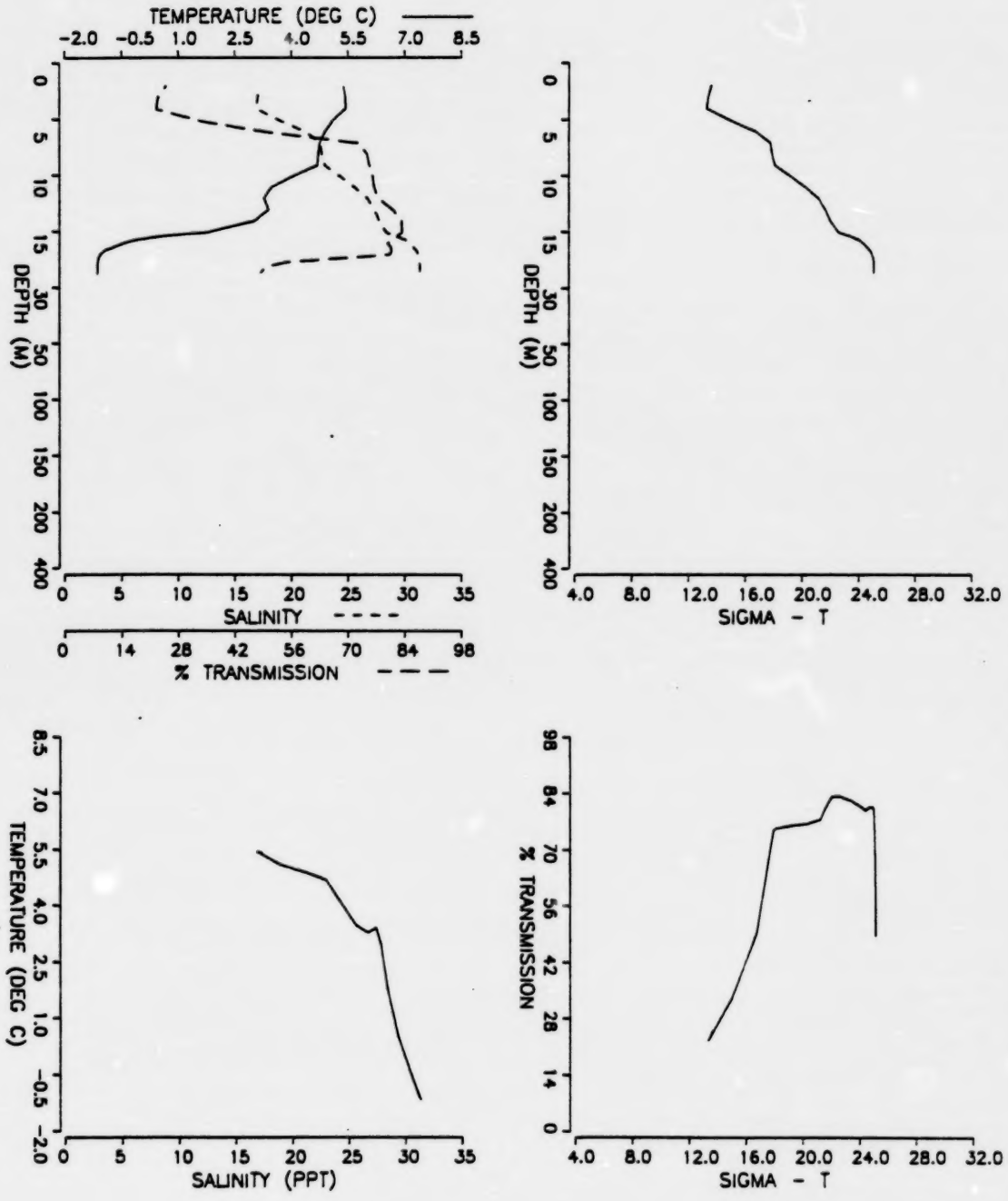
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.84	13.74	4.0	12.89	10.81	6.59	0.34
3.0	5.84	13.75	4.1	12.74	10.81	6.59	0.50
4.0	5.82	13.96	4.5	12.41	10.98	6.58	0.67
5.0	5.74	14.46	6.0	11.25	11.38	6.53	0.84
6.0	5.50	15.72	11.3	8.73	12.39	6.36	0.99
7.0	5.28	16.94	16.3	7.25	13.37	6.20	1.14
8.0	5.13	18.02	17.3	7.02	14.23	6.11	1.28
9.0	5.01	20.51	36.3	4.06	16.21	6.13	1.40
10.0	4.91	22.19	65.2	1.71	17.54	6.12	1.51
12.0	4.54	23.35	69.9	1.43	18.49	5.82	1.71
14.0	3.21	26.63	71.6	1.33	21.20	4.67	1.86
16.0	3.18	27.88	79.7	0.91	22.19	4.71	1.99
18.0	-0.39	30.22	76.6	1.06	24.27	1.28	2.08
20.0	-0.83	30.99	69.2	1.48	24.90	0.88	2.15
22.0	-0.95	31.15	49.6	2.81	25.03	0.77	2.21
24.0	-1.02	31.25	47.7	2.96	25.12	0.70	2.26
26.0	-1.03	31.17	43.7	3.32	25.05	0.70	2.32



STATION S-18 CAST # 5956 DATE : 04:08 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 58.50 N LONG : 133 23.50 W

STATION	LAT	LONG	DATE
S-19	69 59.8 N	133 24.0 W	04:36 GMT ON 16/09/ 86

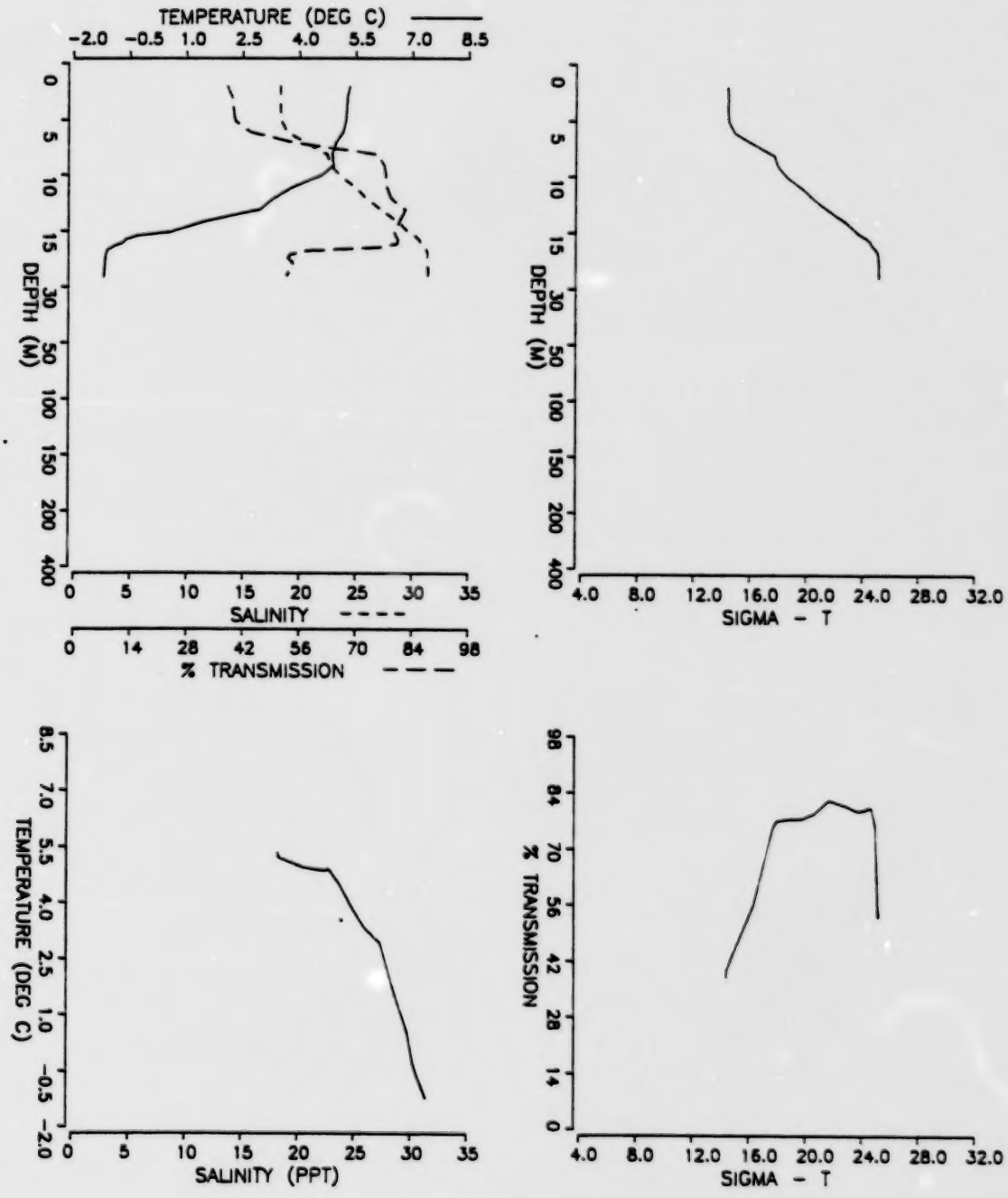
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.40	17.39	25.0	5.54	13.72	6.34	0.28
3.0	5.45	17.11	23.1	5.87	13.49	6.38	0.42
4.0	5.45	16.97	22.7	5.93	13.38	6.37	0.56
5.0	5.12	18.99	32.9	4.45	15.00	6.15	0.70
6.0	4.91	21.27	49.3	2.83	16.82	6.07	0.81
7.0	4.77	22.60	72.5	1.28	17.88	6.00	0.92
8.0	4.73	22.76	74.9	1.16	18.01	5.97	1.02
9.0	4.71	23.01	75.4	1.13	18.21	5.96	1.11
10.0	4.08	24.33	76.2	1.09	19.30	5.41	1.20
12.0	3.29	26.77	77.6	1.01	21.30	4.76	1.35
14.0	3.03	27.81	83.3	0.73	22.15	4.56	1.47
16.0	0.52	29.35	82.3	0.78	23.52	2.14	1.58
18.0	-0.47	30.51	79.8	0.90	24.50	1.21	1.65
20.0	-0.96	31.09	80.8	0.85	24.98	0.75	1.72
22.0	-1.11	31.31	67.2	1.59	25.17	0.62	1.78
24.0	-1.14	31.35	50.3	2.75	25.20	0.60	1.83
26.0	-1.14	31.35	48.4	2.90	25.20	0.60	1.89



STATION S-19 CAST # 5957 DATE : 04:36 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 59.80 N LONG : 133 24.00 W

STATION	LAT	LONG	DATE
S-20	70 1.3 N	133 24.8 W	04:56 GMT ON 16/09/ 86

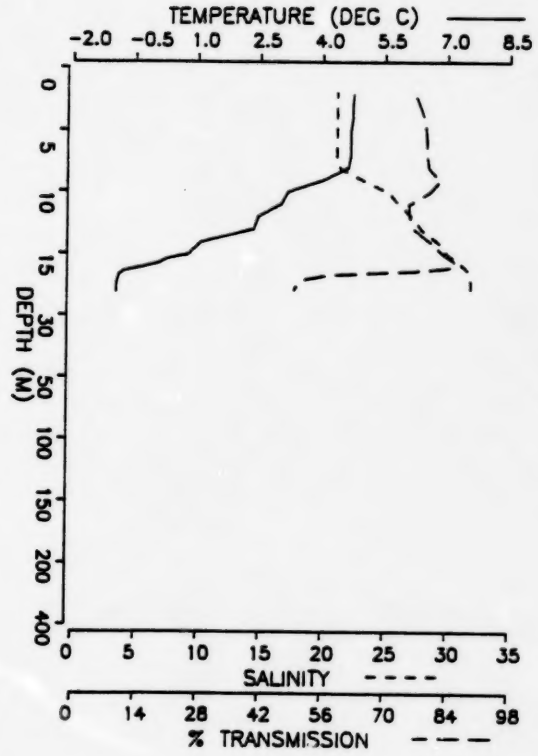
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.35	18.35	38.2	3.85	14.48	6.34	0.26
3.0	5.27	18.37	39.5	3.72	14.50	6.27	0.40
4.0	5.26	18.34	39.8	3.69	14.48	6.25	0.53
5.0	5.24	18.42	40.2	3.65	14.54	6.24	0.66
6.0	5.17	18.96	44.0	3.29	14.98	6.20	0.79
7.0	4.97	20.69	55.6	2.35	16.36	6.10	0.91
8.0	4.88	22.48	75.4	1.13	17.77	6.11	1.02
9.0	4.82	22.82	77.0	1.04	18.04	6.17	1.11
10.0	4.57	23.68	77.4	1.02	18.75	5.87	1.21
12.0	3.35	25.99	78.8	0.95	20.68	4.77	1.37
14.0	1.55	28.70	80.8	0.85	22.95	3.12	1.49
16.0	-0.30	30.31	79.9	0.90	24.33	1.37	1.57
18.0	-0.71	30.78	80.4	0.88	24.73	0.98	1.64
20.0	-1.11	31.29	58.1	2.18	25.15	0.62	1.70
22.0	-1.16	31.36	53.3	2.52	25.21	0.57	1.76
24.0	-1.18	31.38	54.6	2.42	25.23	0.56	1.81
26.0	-1.19	31.40	53.4	2.51	25.24	0.55	1.87
27.0	-1.20	31.42	52.9	2.55	25.26	0.54	1.90

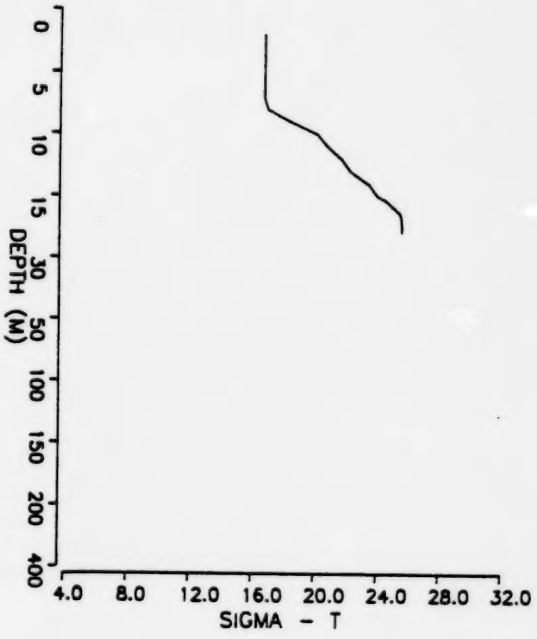


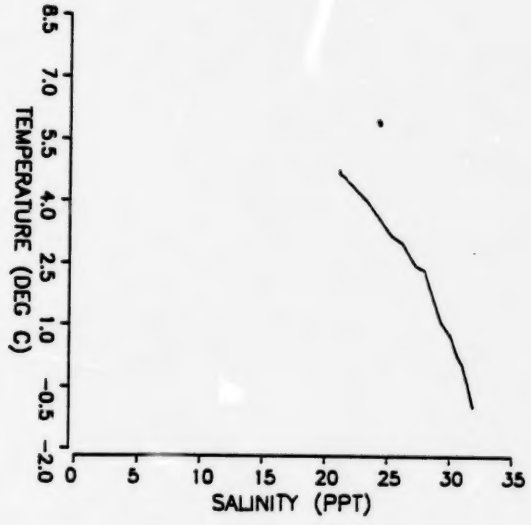
STATION S-20 CAST # 5958 DATE : 04:56 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 1.30 N LONG : 133 24.80 W

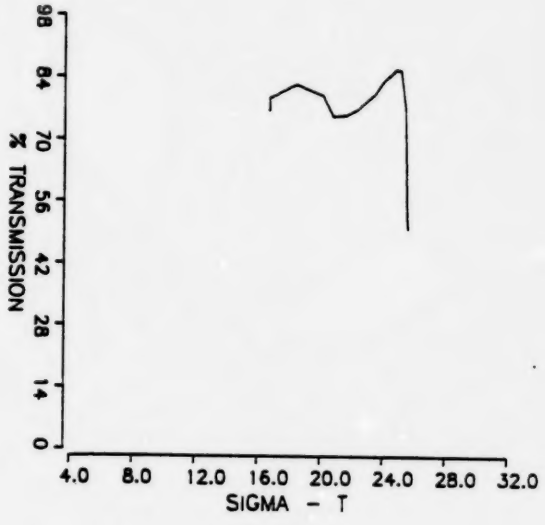
STATION	LAT	LONG	DATE
S-21	70 7.5 N	132 25.0 W	07:15 GMT ON 16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.76	21.18	76.7	1.06	16.76	5.91	0.22
3.0	4.73	21.19	77.8	1.00	16.77	5.88	0.33
4.0	4.73	21.19	78.7	0.96	16.77	5.88	0.44
5.0	4.69	21.19	79.2	0.93	16.77	5.84	0.55
6.0	4.69	21.19	79.4	0.92	16.77	5.84	0.66
7.0	4.69	21.19	79.5	0.92	16.77	5.84	0.77
8.0	4.63	21.46	79.8	0.90	16.99	5.80	0.88
9.0	4.04	23.32	82.5	0.77	18.51	5.32	0.98
10.0	3.19	25.35	80.1	0.89	20.18	4.57	1.06
12.0	2.47	27.26	75.6	1.12	21.75	3.96	1.20
14.0	1.09	29.33	80.3	0.88	23.48	2.70	1.31
16.0	0.27	30.65	84.8	0.66	24.58	1.96	1.38
18.0	-0.34	31.40	85.7	0.62	25.21	1.39	1.45
20.0	-0.90	31.83	57.3	2.23	25.58	0.86	1.50
22.0	-0.95	31.90	51.2	2.67	25.64	0.82	1.55
24.0	-0.96	31.91	49.7	2.80	25.65	0.81	1.59





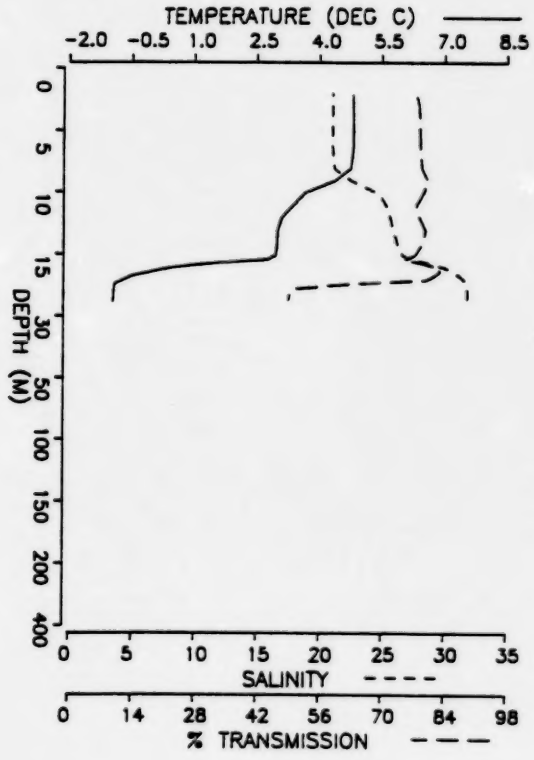


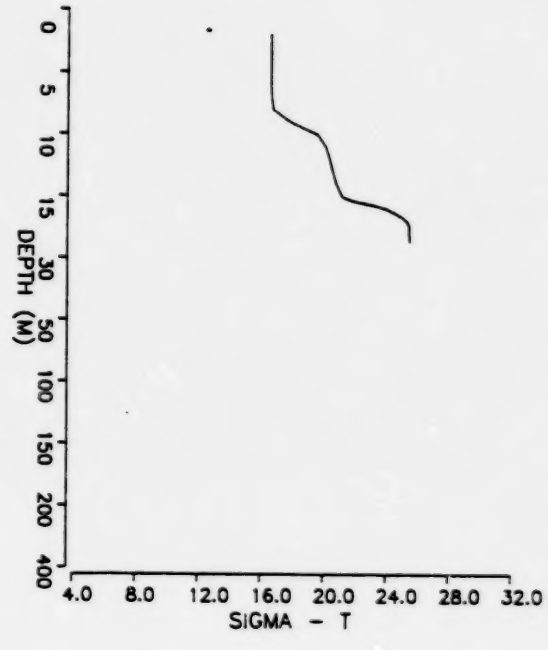


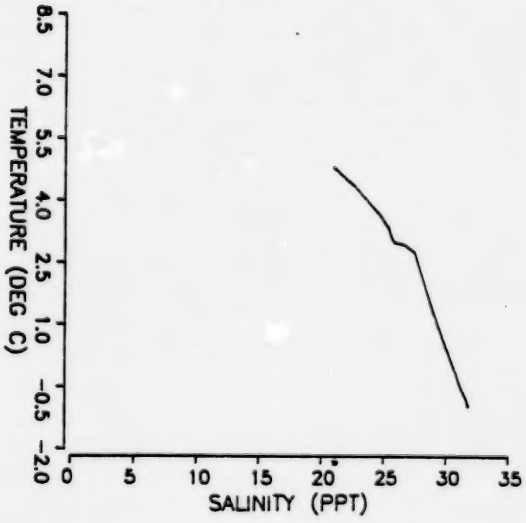
STATION S-21 CAST # 5959 DATE : 07:15 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 7.50 N LONG : 132 25.00 W

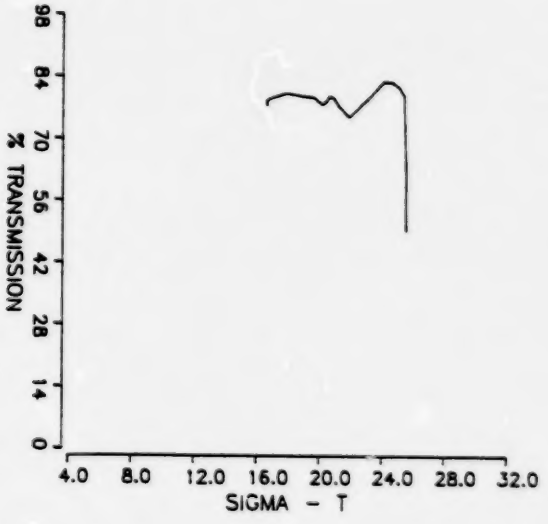
STATION	LAT	LONG	DATE
S-22	70 6.8 N	132 22.1 W	07:32 GMT ON 16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.82	21.09	77.7	1.01	16.68	5.96	0.22
3.0	4.82	21.09	78.2	0.98	16.68	5.96	0.33
4.0	4.82	21.09	78.4	0.97	16.68	5.96	0.44
5.0	4.82	21.09	78.5	0.97	16.68	5.97	0.55
6.0	4.82	21.08	78.6	0.96	16.67	5.97	0.66
7.0	4.80	21.14	78.7	0.96	16.73	5.95	0.77
8.0	4.77	21.25	79.0	0.95	16.82	5.92	0.88
9.0	4.38	22.65	80.3	0.88	17.95	5.62	0.99
10.0	3.68	24.74	79.4	0.92	19.66	5.03	1.08
12.0	3.11	25.69	78.4	0.97	20.46	4.52	1.23
14.0	3.00	26.26	79.3	0.93	20.92	4.44	1.37
16.0	2.78	27.49	75.0	1.15	21.91	4.29	1.50
18.0	0.41	30.12	83.0	0.75	24.15	2.07	1.60
20.0	-0.50	31.24	81.7	0.81	25.09	1.22	1.66
22.0	-0.92	31.81	61.8	1.93	25.56	0.84	1.72
24.0	-0.94	31.82	49.7	2.80	25.57	0.82	1.77
26.0	-0.95	31.85	49.3	2.83	25.60	0.81	1.81





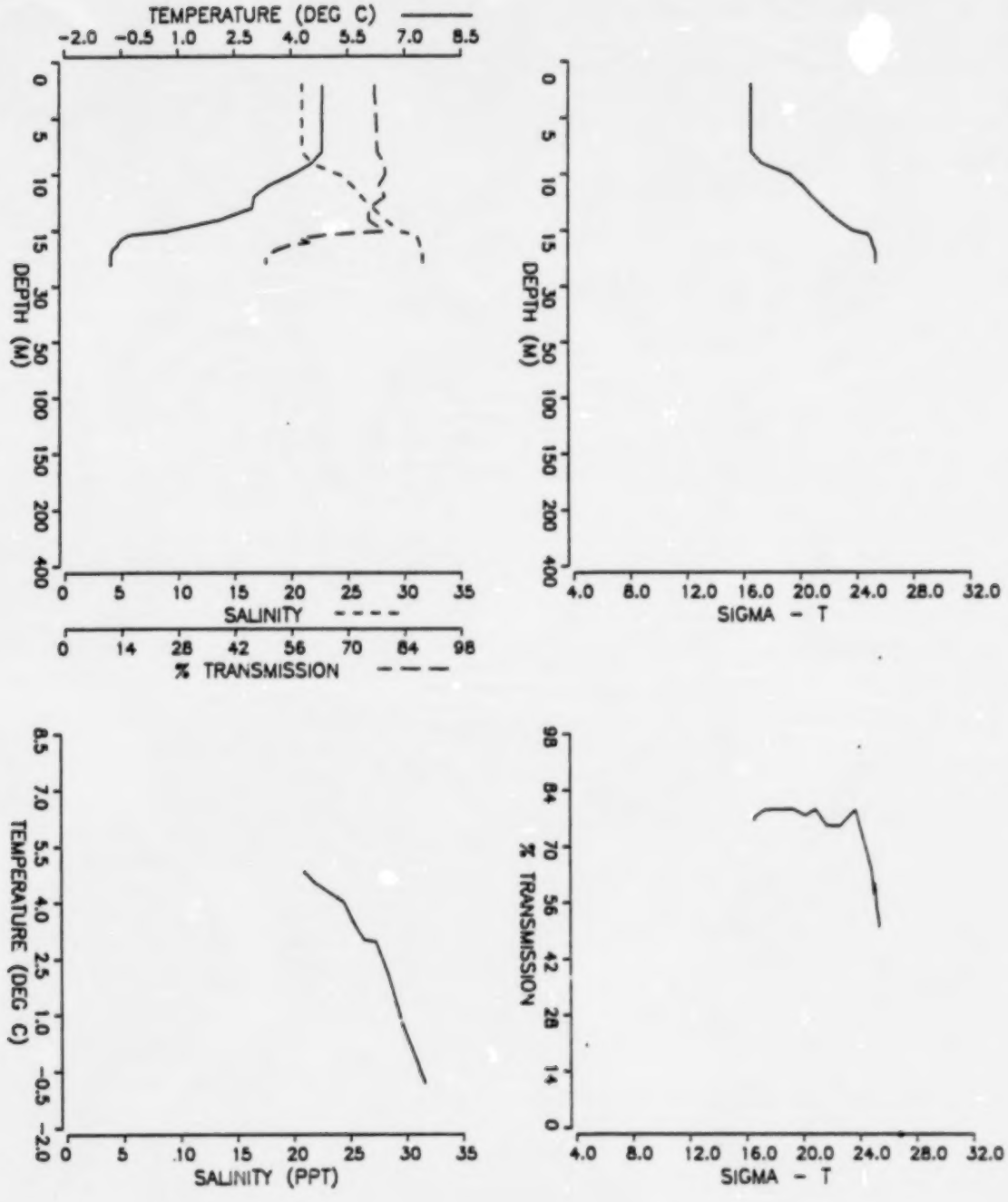




STATION S-22 CAST # 5960 DATE : 07:32 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 6.80 N LONG : 132 22.10 W

STATION	LAT	LONG	DATE
S-23	70 5.6 N	132 24.4 W	07:50 GMT ON 16/09/ 86

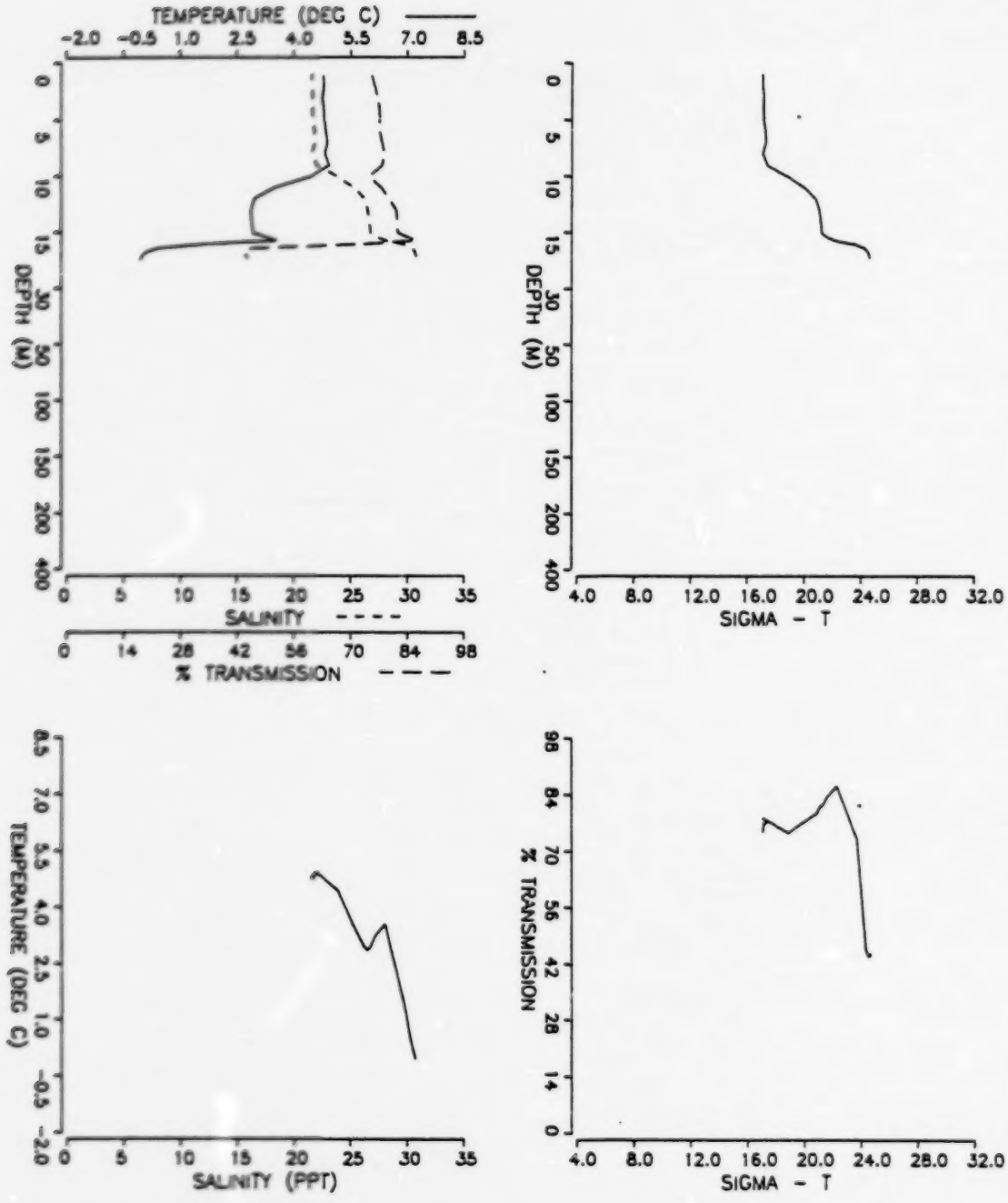
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.85	21.05	76.8	1.05	16.65	5.99	0.22
3.0	4.85	21.04	76.8	1.06	16.64	5.99	0.33
4.0	4.84	21.05	77.1	1.04	16.65	5.98	0.44
5.0	4.84	21.05	77.2	1.04	16.65	5.98	0.55
6.0	4.84	21.05	77.3	1.03	16.65	5.98	0.66
7.0	4.84	21.05	77.4	1.03	16.65	5.98	0.78
8.0	4.83	21.07	77.4	1.02	16.66	5.98	0.89
9.0	4.55	22.00	79.2	0.93	17.42	5.75	0.99
10.0	4.05	24.42	79.3	0.93	19.38	5.39	1.09
12.0	3.05	26.30	79.3	0.93	20.94	4.48	1.24
14.0	2.13	28.41	75.3	1.14	22.68	3.68	1.36
16.0	-0.25	30.98	64.8	1.74	24.88	1.45	1.44
18.0	-0.57	31.33	60.7	2.00	25.17	1.16	1.50
20.0	-0.72	31.54	52.8	2.56	25.34	1.02	1.56
22.0	-0.78	31.61	50.2	2.76	25.40	0.97	1.61
24.0	-0.78	31.61	50.0	2.77	25.40	0.97	1.66



STATION S-23 CAST # 5961 DATE : 07:50 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 5.60 N LONG : 132 24.40 W

STATION	LAT	LONG	DATE
S-24	70 4.5 N	132 23.5 W	08:07 GMT ON 16/09/ 86

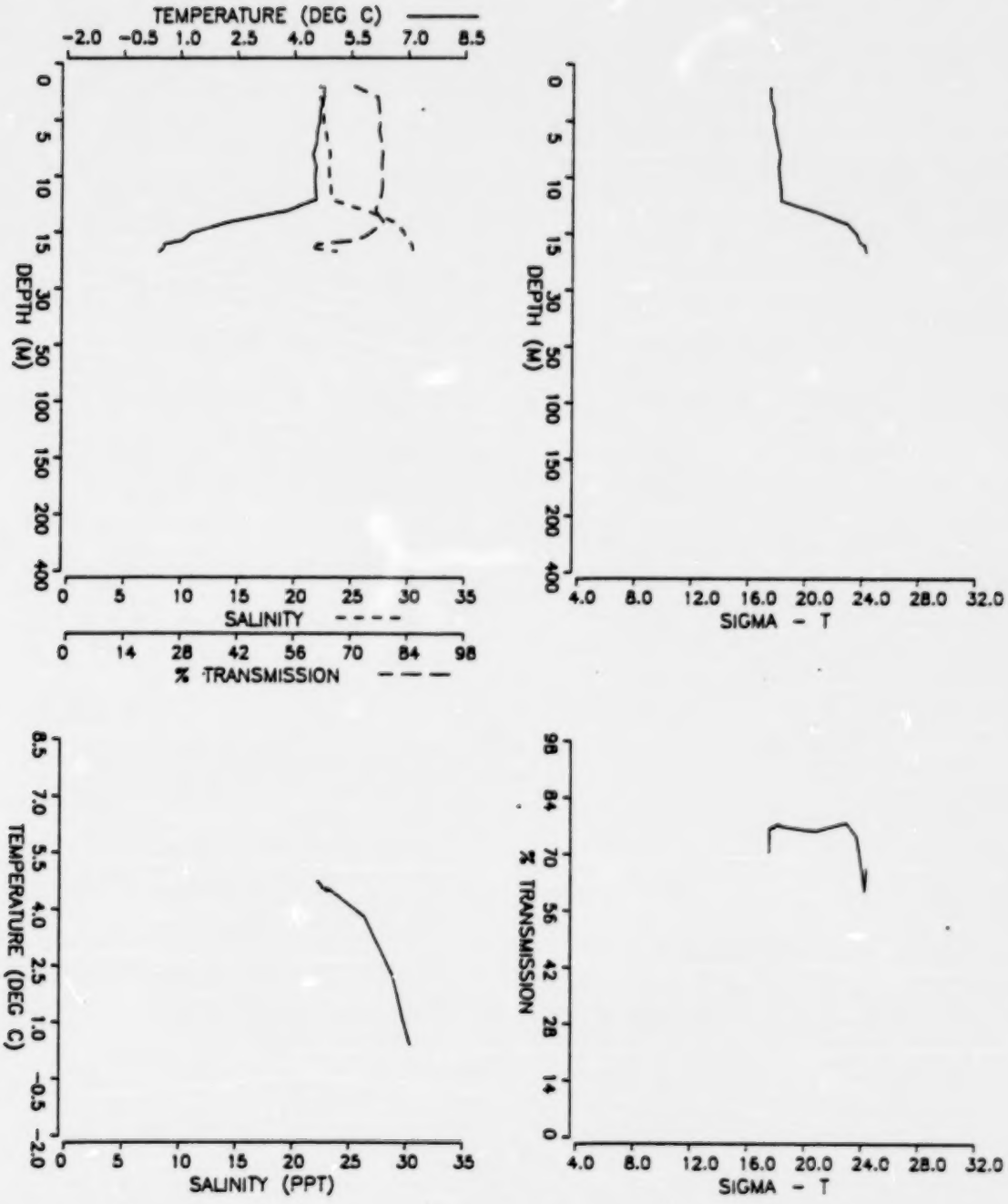
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	4.79	21.67	75.1	1.14	17.14	5.96	0.11
2.0	4.80	21.68	75.9	1.10	17.15	5.97	0.21
3.0	4.76	21.76	76.7	1.06	17.22	5.94	0.32
4.0	4.80	21.72	77.1	1.04	17.18	5.98	0.42
5.0	4.82	21.76	77.2	1.04	17.21	6.00	0.53
6.0	4.86	21.93	77.3	1.03	17.34	6.05	0.63
7.0	4.89	21.96	77.8	1.00	17.37	6.09	0.74
8.0	4.82	21.68	78.3	0.98	17.15	6.01	0.84
9.0	4.94	22.12	77.8	1.00	17.48	6.15	0.95
10.0	4.47	23.92	74.8	1.16	18.95	5.78	1.04
12.0	2.99	26.25	79.5	0.92	20.91	4.42	1.20
14.0	2.91	26.69	81.6	0.81	21.27	4.38	1.33
16.0	3.27	27.27	83.8	0.71	21.70	4.76	1.46
18.0	1.58	29.68	73.3	1.24	23.74	3.21	1.57
20.0	0.14	30.63	44.1	3.28	24.58	1.82	1.64
22.0	-0.03	30.80	45.1	3.19	24.72	1.67	1.71


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION S-24 CAST # 5962 DATE : 08:07 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 4.50 N LONG : 132 23.50 W

STATION	LAT	LONG	DATE
S-25	70 2.8 N	132 23.0 W	08:24 GMT ON 16/09/ 86

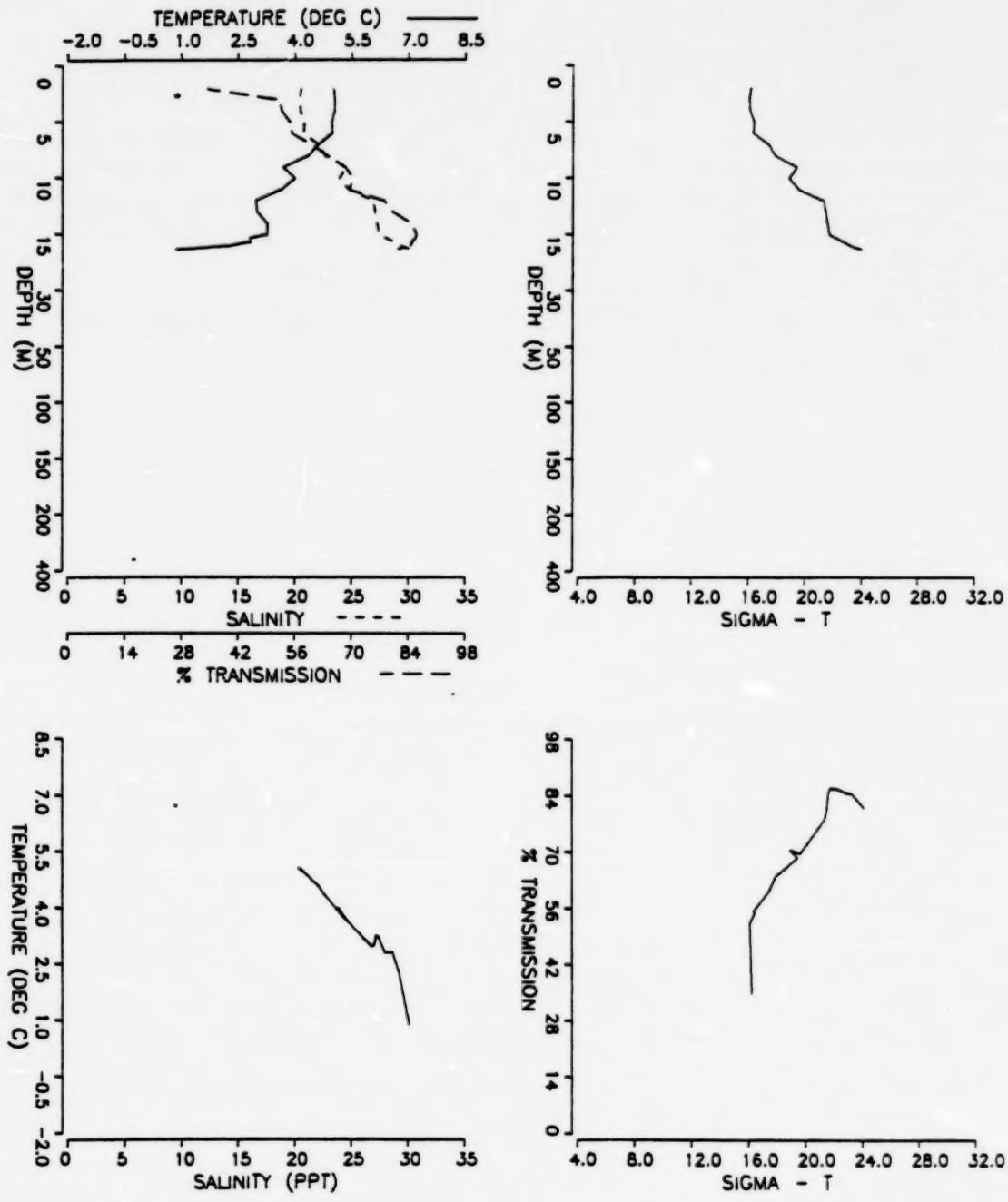
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	4.78	22.29	70.9	1.38	17.64	5.99	0.20
3.0	4.78	22.30	76.4	1.08	17.64	5.99	0.30
4.0	4.68	22.59	76.7	1.06	17.88	5.91	0.40
5.0	4.67	22.58	77.1	1.04	17.87	5.90	0.50
6.0	4.60	22.75	76.8	1.06	18.01	5.84	0.60
7.0	4.58	22.90	77.3	1.03	18.13	5.83	0.70
8.0	4.50	23.17	77.6	1.01	18.35	5.76	0.79
9.0	4.57	23.03	77.4	1.02	18.24	5.83	0.89
10.0	4.54	23.08	77.5	1.02	18.28	5.80	0.98
12.0	4.58	23.26	77.1	1.04	18.42	5.85	1.17
14.0	2.28	28.91	77.9	1.00	23.07	3.87	1.31
16.0	1.18	29.77	73.3	1.24	23.83	2.81	1.40
18.0	0.57	30.34	61.7	1.93	24.33	2.24	1.47
20.0	0.43	30.51	66.8	1.61	24.46	2.11	1.55



STATION S-25 CAST # 5963 DATE : 08:24 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 2.80 N LONG : 132 23.00 W

STATION	LAT	LONG	DATE
S-26	70 1.3 N	132 22.7 W	08:40 GMT ON 16/09/ 86

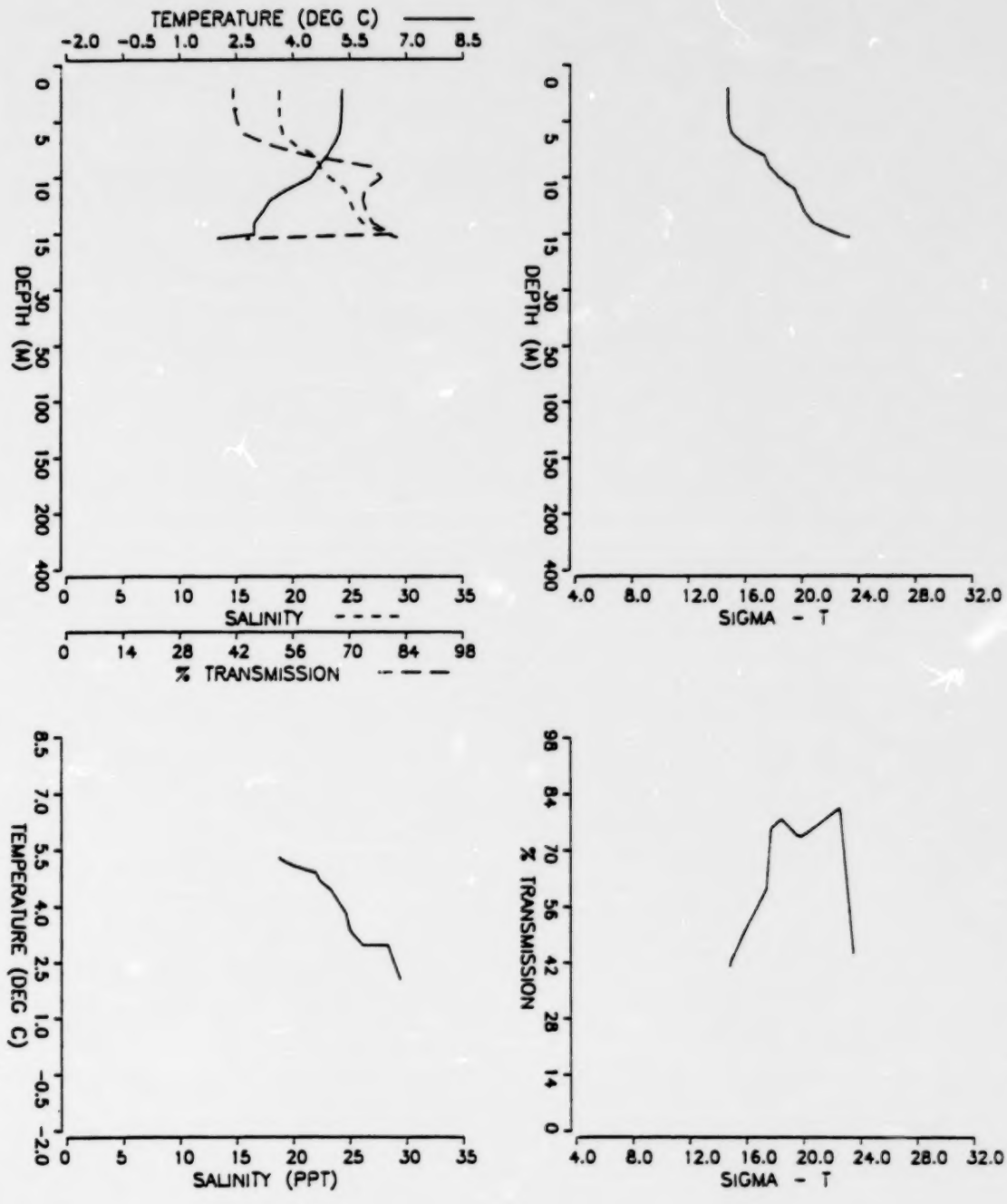
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.05	20.62	34.6	4.25	16.29	6.16	0.23
3.0	5.07	20.47	52.4	2.59	16.17	6.18	0.34
4.0	5.06	20.53	52.9	2.55	16.22	6.17	0.46
5.0	4.98	20.90	54.9	2.40	16.52	6.12	0.57
6.0	5.00	20.80	55.4	2.36	16.44	6.13	0.68
7.0	4.62	22.13	60.3	2.02	17.52	5.82	0.79
8.0	4.37	22.72	64.1	1.78	18.01	5.61	0.89
9.0	3.70	24.59	68.5	1.52	19.54	5.04	0.98
10.0	4.01	23.94	70.6	1.39	19.00	5.32	1.07
12.0	2.98	26.93	78.1	0.99	21.45	4.46	1.22
14.0	3.28	27.28	84.9	0.66	21.71	4.78	1.35
16.0	2.83	28.06	85.7	0.62	22.37	4.37	1.47
18.0	2.32	29.27	84.5	0.67	23.36	3.93	1.57
19.0	0.88	30.20	81.1	0.84	24.20	2.55	1.61



STATION S-26 CAST # 5964 DATE : 08:40 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 70 1.30 N LONG : 132 22.70 W

STATION	LAT	LONG	DATE
S-27	69 59.7 N	132 23.3 W	09:02 GMT ON 16/09/ 86

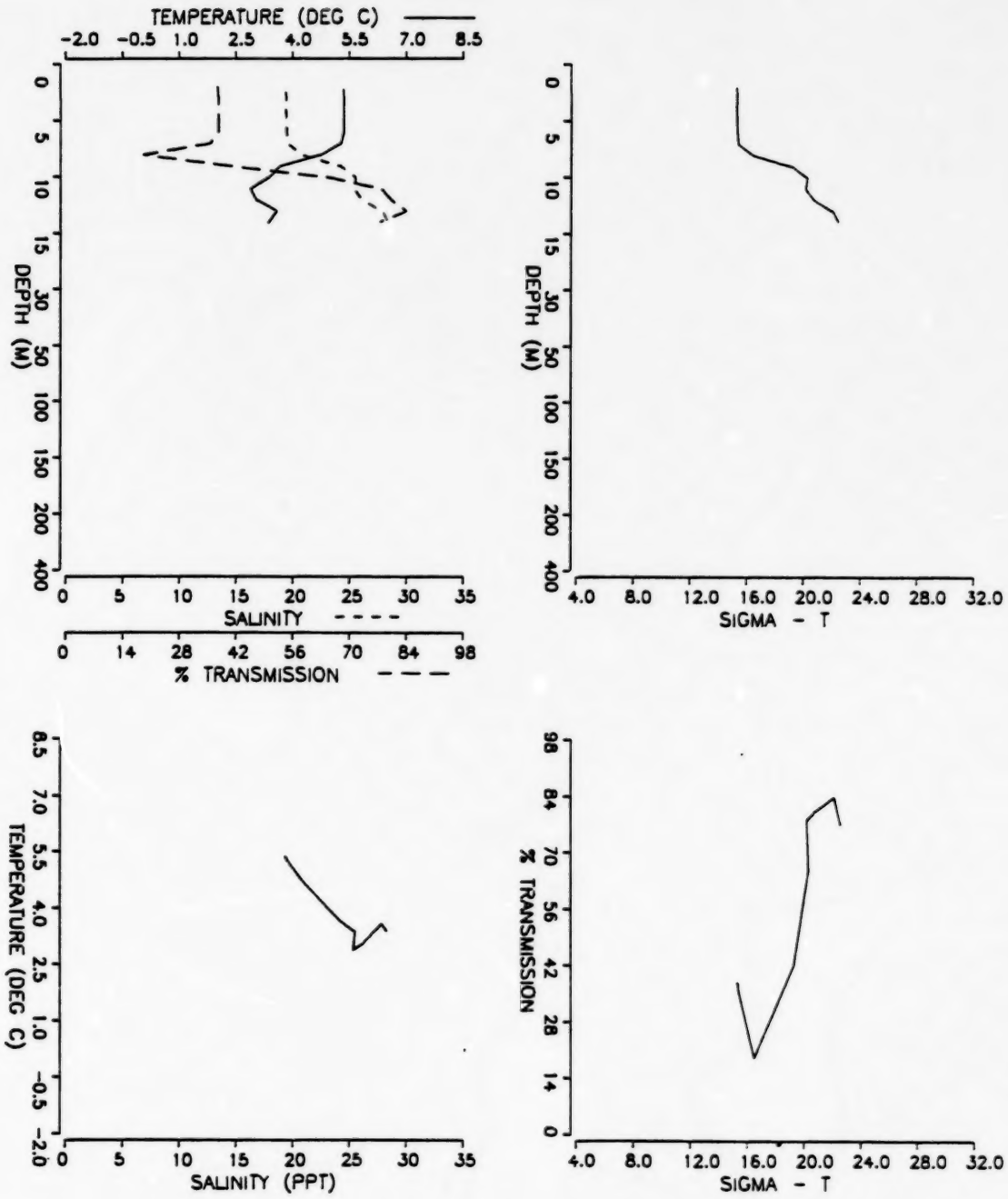
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.32	18.85	41.4	3.53	14.88	6.34	0.26
3.0	5.31	18.85	41.4	3.53	14.88	6.34	0.38
4.0	5.30	18.86	41.8	3.49	14.88	6.33	0.51
5.0	5.29	18.92	42.4	3.43	14.93	6.31	0.64
6.0	5.24	19.15	44.0	3.29	15.12	6.28	0.77
7.0	5.10	20.20	50.4	2.74	15.96	6.20	0.89
8.0	4.93	22.03	60.3	2.02	17.42	6.13	1.00
9.0	4.69	22.42	75.4	1.13	17.74	5.91	1.10
10.0	4.48	23.34	77.9	1.00	18.49	5.75	1.20
12.0	3.40	25.05	73.4	1.24	19.92	4.77	1.36
14.0	2.99	26.23	75.8	1.11	20.89	4.42	1.51
16.0	2.03	29.48	44.1	3.27	23.55	3.65	1.62



STATION S-27 CAST # 5965 DATE : 09:02 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 59.70 N LONG : 132 23.30 W

STATION	LAT	LONG	DATE
S-28	69 58.6 N	132 22.6 W	09:31 GMT ON 16/09/ 86

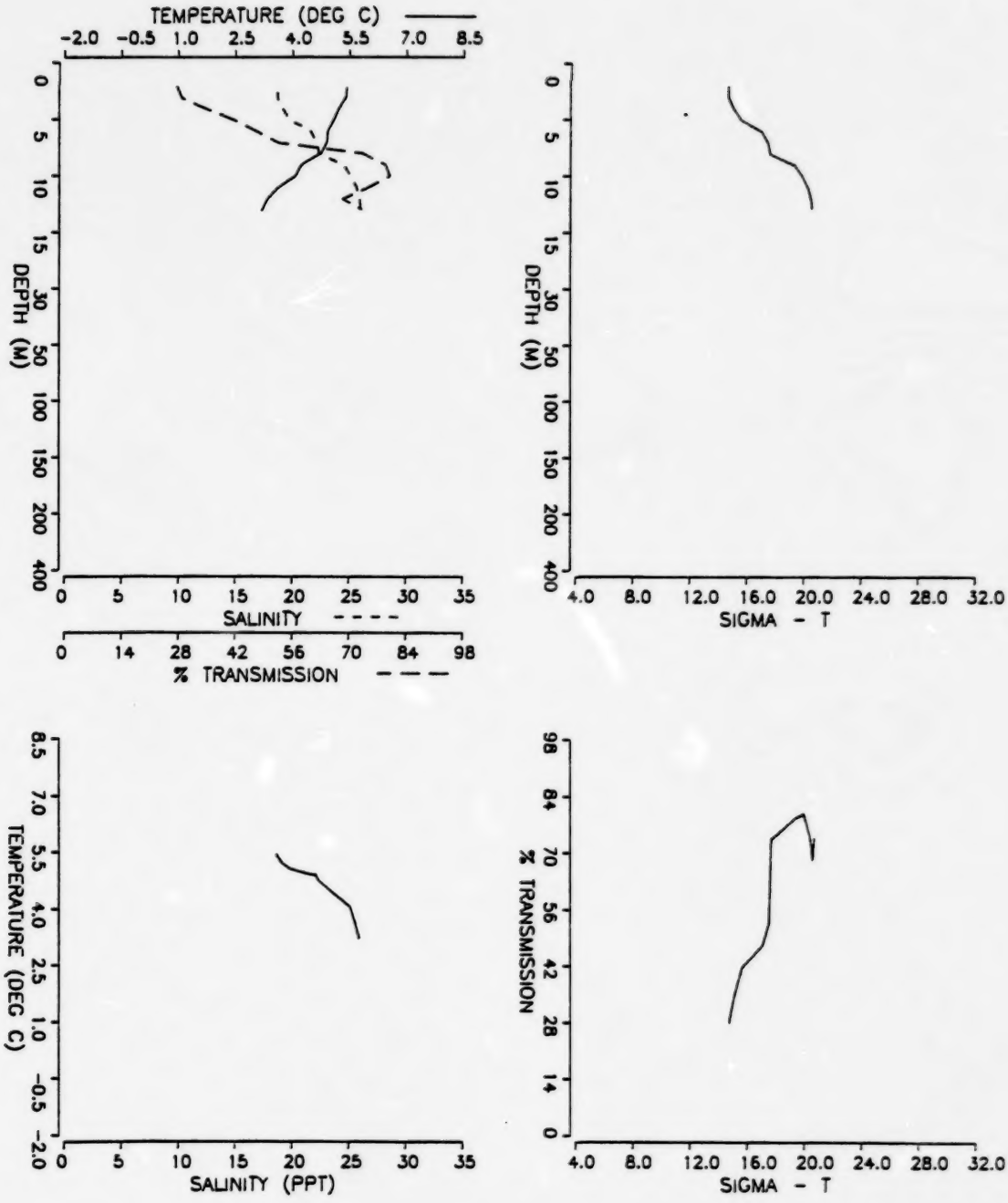
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.37	19.48	37.5	3.92	15.37	6.42	0.25
3.0	5.37	19.48	37.7	3.90	15.37	6.42	0.37
4.0	5.37	19.46	37.7	3.90	15.35	6.42	0.49
5.0	5.37	19.48	37.7	3.90	15.37	6.42	0.62
6.0	5.37	19.52	37.7	3.90	15.40	6.43	0.74
7.0	5.29	19.60	35.7	4.12	15.47	6.35	0.86
8.0	4.77	20.86	19.3	6.58	16.51	5.91	0.98
9.0	3.67	24.29	41.9	3.48	19.30	5.00	1.08
10.0	3.39	25.59	65.5	1.69	20.36	4.79	1.16
12.0	3.06	26.19	80.4	0.87	20.85	4.49	1.31
14.0	3.38	28.42	77.2	1.04	22.61	4.94	1.42



STATION S-28 CAST # 5966 DATE : 09:31 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 58.60 N LONG : 132 22.60 W

STATION	LAT	LONG	DATE
S-29	69 56.8 N	132 22.0 W	09:37 GMT ON 16/09/ 86

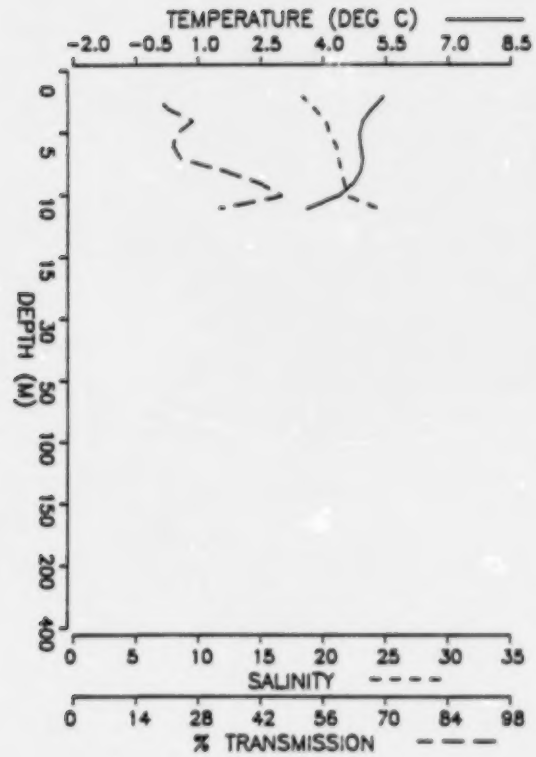
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.46	18.77	27.9	5.11	14.80	6.48	0.26
3.0	5.43	18.79	29.0	4.94	14.82	6.45	0.39
4.0	5.24	19.21	35.1	4.19	15.17	6.29	0.51
5.0	5.11	19.88	42.0	3.47	15.70	6.19	0.64
6.0	4.95	21.64	47.3	3.00	17.11	6.12	0.75
7.0	4.92	22.20	52.7	2.56	17.55	6.13	0.85
8.0	4.78	22.40	73.4	1.24	17.72	6.00	0.95
9.0	4.25	24.53	78.9	0.95	19.45	5.59	1.05
10.0	4.09	25.18	79.9	0.90	19.98	5.46	1.13
12.0	3.36	25.90	68.6	1.51	20.60	4.78	1.28
13.0	3.22	26.02	73.6	1.22	20.71	4.64	1.35

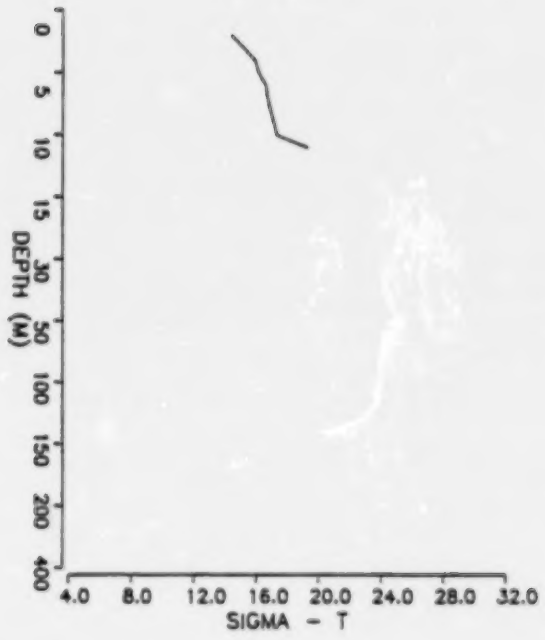

TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

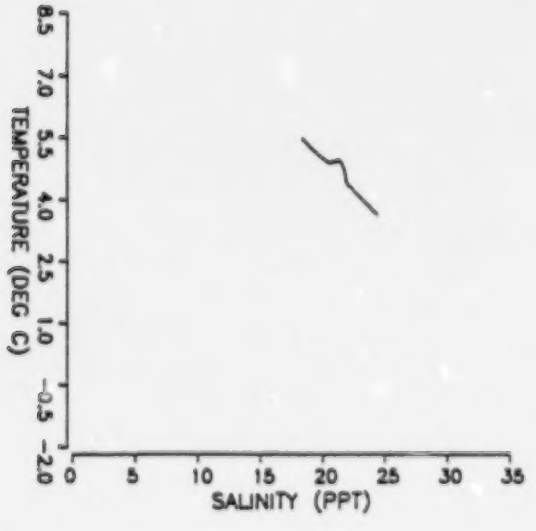
STATION S-29 CAST # 5967 DATE : 09:37 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 56.80 N LONG : 132 22.00 W

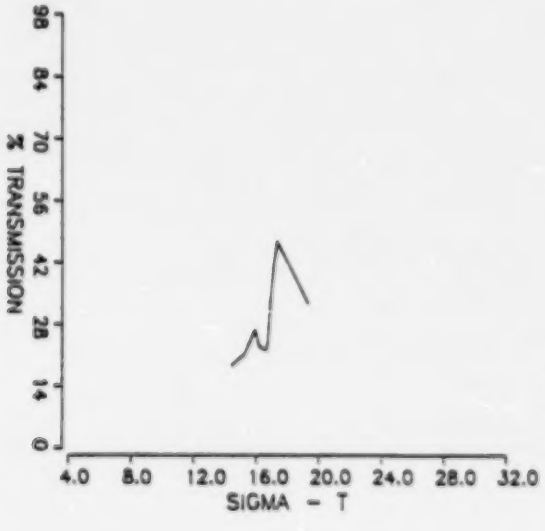
STATION	LAT	LONG	DATE
S-30	69 55.4 N	132 21.4 W	09:55 GMT ON 16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
2.0	5.48	18.42	18.9	6.67	14.52	6.48	0.26
3.0	5.19	19.36	21.2	6.21	15.29	6.24	0.39
4.0	4.97	20.24	26.8	5.26	16.00	6.07	0.51
5.0	4.89	20.55	23.2	5.85	16.25	6.01	0.63
6.0	4.91	21.12	22.4	5.98	16.70	6.06	0.74
7.0	4.97	21.28	24.2	5.68	16.82	6.12	0.85
8.0	4.92	21.50	33.9	4.32	17.00	6.10	0.96
9.0	4.75	21.75	42.0	3.47	17.21	5.94	1.06
10.0	4.40	21.98	46.8	3.04	17.42	5.60	1.17
11.0	3.63	24.48	32.6	4.48	19.45	4.97	1.26





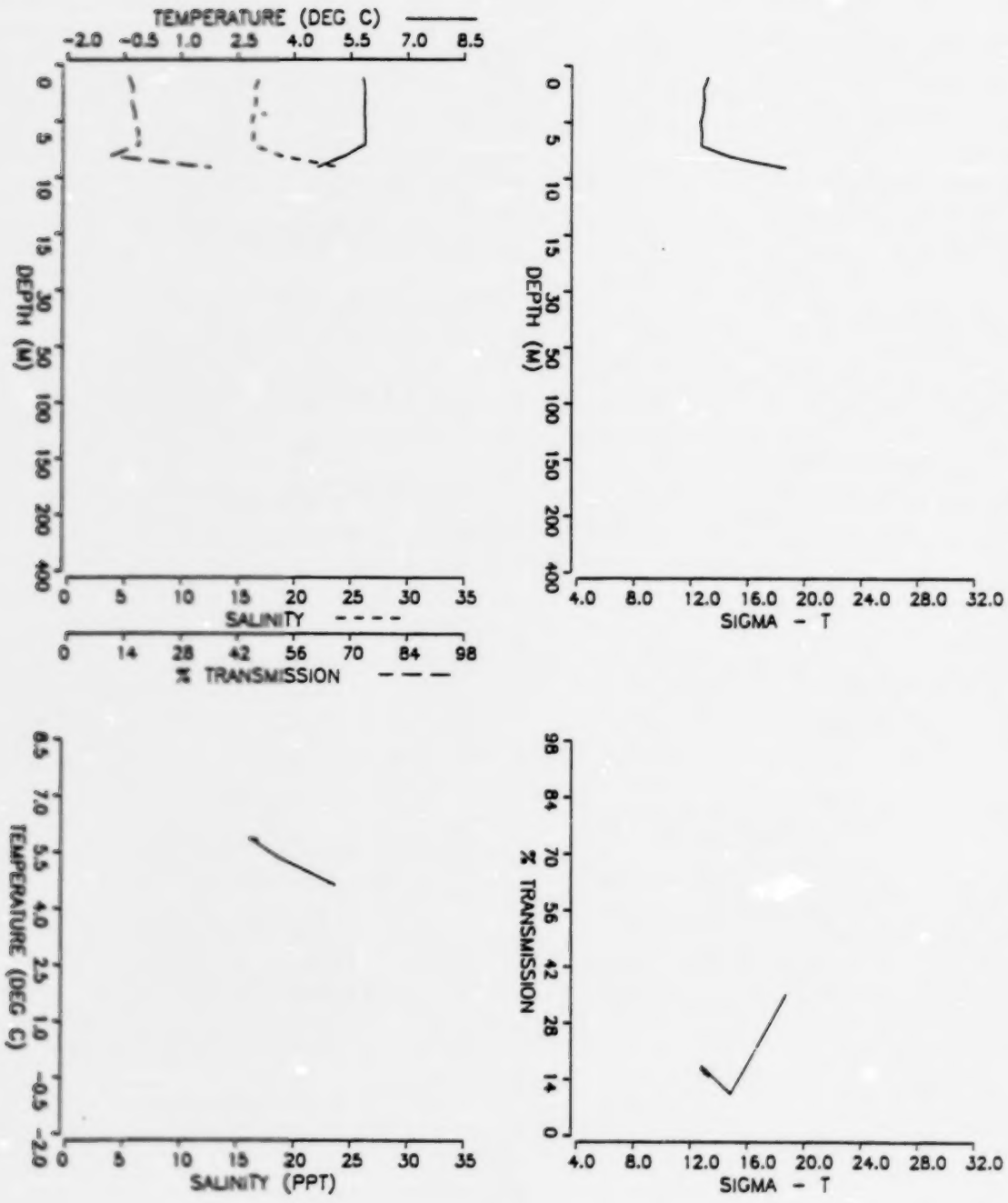




STATION S-30 CAST # 5968 DATE : 09:55 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 55.40 N LONG : 132 21.40 W

STATION	LAT	LONG	DATE
S-31	69 53.9 N	132 21.0 W	10:11 GMT ON 16/09/ 86

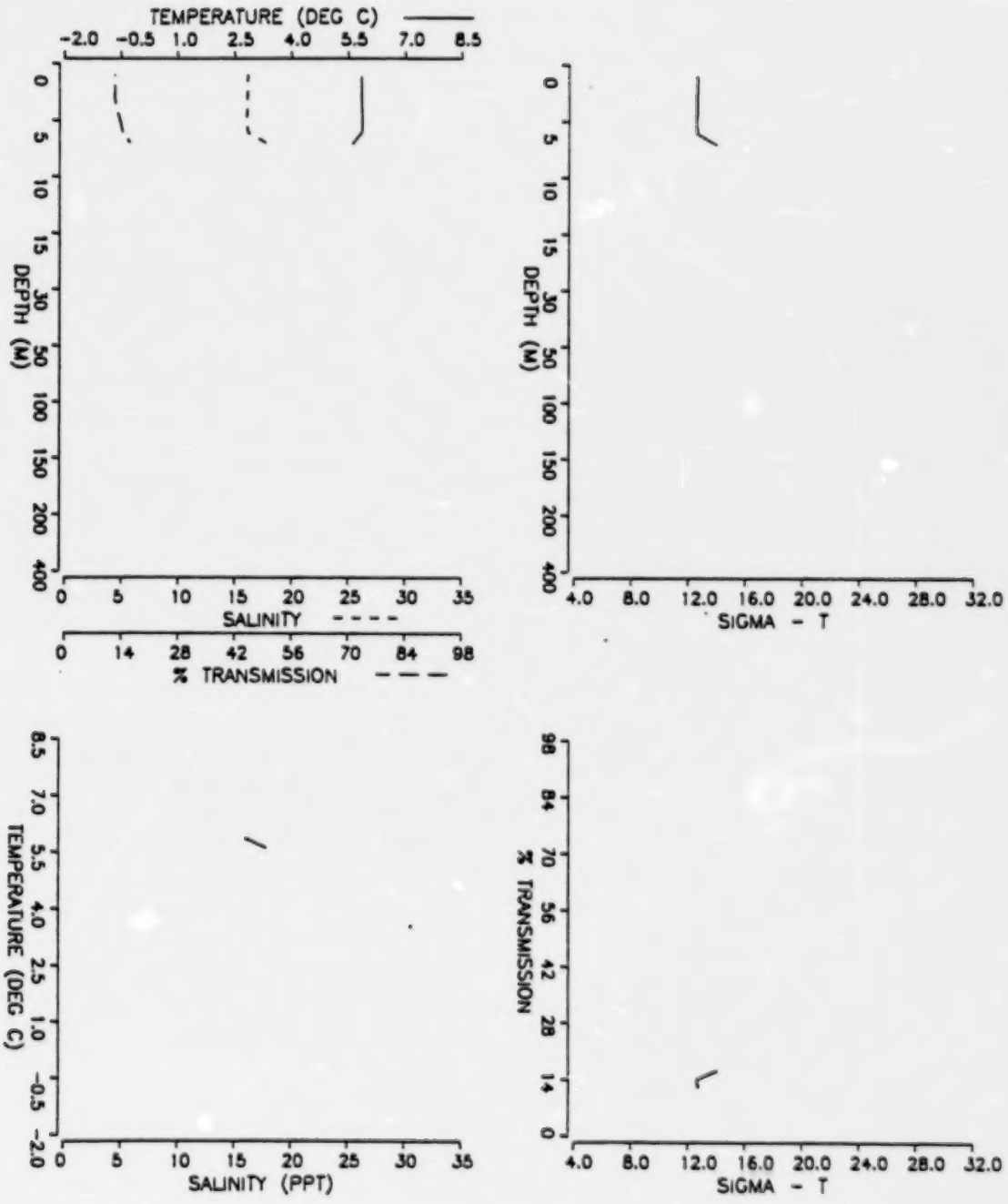
DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.83	16.95	15.0	7.59	13.33	6.75	0.14
2.0	5.87	16.52	16.1	7.31	13.00	6.77	0.29
3.0	5.88	16.60	15.6	7.43	13.06	6.78	0.43
4.0	5.86	16.50	16.3	7.25	12.98	6.76	0.58
5.0	5.88	16.24	16.8	7.14	12.78	6.76	0.73
6.0	5.88	16.39	17.3	7.01	12.89	6.77	0.88
7.0	5.88	16.33	17.5	6.97	12.84	6.77	1.02
8.0	5.38	18.88	10.7	8.96	14.89	6.41	1.16
9.0	4.65	23.85	35.5	4.14	18.88	5.95	1.27


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION S-31 CAST # 5969 DATE : 10:11 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 53.90 N LONG : 132 21.00 W

STATION	LAT	LONG	DATE
S-32	69 52.8 N	132 21.0 W	10:29 GMT ON 16/09/ 86

DEPTH	TEMP	SALN	TRNS	ATTN	SIGT	T-Tf	DYN HT
1.0	5.86	16.22	12.5	8.31	12.76	6.74	0.15
2.0	5.86	16.18	12.5	8.32	12.73	6.74	0.30
3.0	5.86	16.17	12.4	8.36	12.72	6.74	0.45
4.0	5.87	16.17	13.0	8.16	12.72	6.75	0.60
5.0	5.88	16.10	13.8	7.93	12.66	6.75	0.75
6.0	5.88	16.19	14.4	7.76	12.73	6.76	0.90
7.0	5.63	17.99	16.5	7.20	14.17	6.61	1.04


TEMPERATURE (DEG C)
-2.0 -0.5 1.0 2.5 4.0 5.5 7.0 8.5
DEPTH (M)
0 5 10 15 30 50 100 150 200 400
0 5 10 15 20 25 30 35
SALINITY
0 14 28 42 56 70 84 98
% TRANSMISSION
4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0
SIGMA - T
TEMPERATURE (DEG C)
SALINITY (PPT)
% TRANSMISSION
SIGMA - T

STATION S-32 CAST # 5970 DATE : 10:29 ON 16/09/ 86
WATER DEPTH UNKNOWN INSTRUMENT : GUILDLINE CTD
LAT : 69 52.80 N LONG : 132 21.00 W

Other NOGAP B.6 Data Reports Published Previously in the Canadian Data Report of Hydrography and Ocean Sciences Series

Macdonald, R.W., K. Iseki, E.C. Carmack, D. M. Macdonald, M. C. O'Brien, and F. A. McLaughlin, 1988. Data Report: NOGAP B.6; Beaufort Sea Oceanography, September, 1986. *Can. Data Rep. Hydrogr. Ocean Sci.:* **58**, 68pp.